

FILE 'USPATFULL, CAPLUS' ENTERED AT 09:46:31 ON 13 AUG 2002  
L1 8457 FILE USPATFULL  
L2 15706 FILE CAPLUS  
TOTAL FOR ALL FILES  
L3 24163 S ASPIRIN

FILE 'REGISTRY' ENTERED AT 09:46:42 ON 13 AUG 2002  
L4 1 S ASPIRIN/CN

FILE 'USPATFULL, CAPLUS' ENTERED AT 09:47:18 ON 13 AUG 2002  
L5 9939 FILE USPATFULL  
L6 23400 FILE CAPLUS  
TOTAL FOR ALL FILES  
L7 33339 S L4 OR ASPIRIN OR (ACETYLSALICYLIC ACID)  
L8 352 FILE USPATFULL  
L9 57 FILE CAPLUS  
TOTAL FOR ALL FILES  
L10 409 S L7 AND (FACTOR XA)  
L11 146 FILE USPATFULL  
L12 2 FILE CAPLUS  
TOTAL FOR ALL FILES  
L13 148 S L10 AND SYNERG?  
L14 37 FILE USPATFULL  
L15 68 FILE CAPLUS  
TOTAL FOR ALL FILES  
L16 105 S ENOXAPARIN AND (FACTOR XA)  
L17 8 FILE USPATFULL  
L18 45 FILE CAPLUS  
TOTAL FOR ALL FILES  
L19 53 S ENOXAPARIN (1S) (FACTOR XA)

FILE 'CAPLUS' ENTERED AT 09:52:59 ON 13 AUG 2002  
E FACTOR XA/CT  
E E3+ALL  
L20 0 S E13 AND E14  
L21 3145 S E13 OR E14  
E E14+ALL  
L22 3039 S (E16-E20) AND XA  
L23 2 S L22 AND L7 AND SYNERG?  
L24 0 S 9002-05-5/RL  
L25 2482 S 9002-05-5/BIOL  
L26 17 S L25 AND ASPIRIN  
L27 34 S L25 AND L7  
L28 29 S L27 AND XA  
L29 2 S L28 AND (SYNERG? OR SUBTHERAPEUTIC?)

FILE 'USPATFULL, PCTFULL, EUROPATFULL' ENTERED AT 10:08:44 ON 13 AUG 2002  
L30 1129 FILE USPATFULL  
L31 0 FILE PCTFULL  
L32 0 FILE EUROPATFULL  
TOTAL FOR ALL FILES  
L33 1129 S L4

=> s 17  
L34 9939 FILE USPATFULL  
'CN' IS NOT A VALID FIELD CODE  
L35 426 FILE PCTFULL  
'CN' IS NOT A VALID FIELD CODE  
L36 1972 FILE EUROPATFULL

TOTAL FOR ALL FILES  
L37 12337 L7

280772-94-3P	280772-95-4P	280772-96-5P	280772-97-6P	280772-98-7P
280772-99-8P	280773-00-4P	280773-01-5P	280773-02-6P	280773-03-7P
280773-04-8P	280773-05-9P	280773-06-0P	280773-08-2P	280773-09-3P
280773-10-6P	280773-11-7P	280773-12-8P	280773-13-9P	280773-15-1P
280773-16-2P	280773-17-3P	280773-18-4P	280773-20-8P	280773-21-9P
280773-22-0P	280773-24-2P	280773-25-3P	280773-26-4P	280773-27-5P
280773-28-6P	280773-30-0P	280773-31-1P	280773-32-2P	280773-34-4P
<del>280773-35-5P</del>	<del>280773-36-6P</del>	<del>280773-37-7P</del>	<del>280773-40-2P</del>	<del>280773-42-4P</del>
280773-43-5P	280773-44-6P	280773-46-8P	280773-47-9P	280773-48-0P
280773-49-1P	280773-50-4P	280773-52-6P	280773-53-7P	280773-54-8P
280773-55-9P	280773-57-1P	280773-58-2P	280773-60-6P	280773-61-7P
280773-63-9P	280773-64-0P	280773-66-2P	280773-67-3P	280773-68-4P
280773-69-5P	280773-70-8P	280773-72-0P	280773-73-1P	280773-75-3P
280773-76-4P	280773-78-6P	280773-79-7P	280773-81-1P	280773-82-2P
280773-84-4P	280773-85-5P	280773-86-6P	280773-87-7P	280773-89-9P
280773-90-2P	280773-91-3P	280773-93-5P	280773-94-6P	280773-96-8P
280773-97-9P	280773-98-0P	280773-99-1P	280774-00-7P	

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of heteroaryl-substituted arom. amides as factor **Xa** inhibitors)

IT 280774-01-8P 280774-02-9P 280774-03-0P 280774-04-1P 280774-05-2P  
280774-06-3P 280774-07-4P 280774-08-5P 280774-09-6P 280774-15-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of heteroaryl-substituted arom. amides as factor **Xa** inhibitors)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Beight Douglas Wade; WO 9900121 A 1999 CAPLUS
- (2) Beight Douglas Wade; WO 9900128 A 1999 CAPLUS
- (3) Berlex Lab; WO 9628427 A 1996 CAPLUS
- (4) Kataura; EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY CHIMICA THERAPEUTICA 1995, V30(5), P387 CAPLUS
- (5) Kunitada, S; CURRENT PHARMACEUTICAL DESIGN 1996, V2(5), P6
- (6) Schering Ag; WO 9932477 A 1999 CAPLUS

L28 ANSWER 20 OF 29 CAPLUS COPYRIGHT 2002 ACS

AN 2000:116927 CAPLUS

DN 132:150612

TI Use of anti-coagulation factor antibodies as long-lasting protective agents

IN Feuerstein, Giora Zeev

PA Smithkline Beecham Corp., USA

SO PCT Int. Appl., 23 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K039-395

CC 15-3 (Immunochemistry)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000007626	A1	20000217	WO 1999-US17704	19990803
	W: CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 2001018052	A1	<del>20010830</del>	US 2001-817960	20010327
PRAI	US 1998-95714P	P	<del>19980807</del>		
	US 1999-359202	B1	19990722		
AB	The use of antibodies and antigen-binding fragments directed against coagulation factors and their use in inhibiting thrombosis are disclosed.				
ST	monoclonal antibody blood coagulation factor thrombosis				

IT Heart, disease  
(angina pectoris, thrombosis assocd. with; use of anti-coagulation factor antibodies as long-lasting protective agents)

IT Drugs  
(anti-platelet; use of anti-coagulation factor antibodies as long-lasting protective agents)

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IT Blood vessel  
(artificial, thrombosis assocd. with shunts; use of anti-coagulation factor antibodies as long-lasting protective agents)

IT Organ, animal  
(artificial, thrombosis assocd. with; use of anti-coagulation factor antibodies as long-lasting protective agents)

IT Heart, disease  
(atrial fibrillation, thrombosis assocd. with; use of anti-coagulation factor antibodies as long-lasting protective agents)

IT Artery  
(coronary, angioplasty, thrombosis assocd. with; use of anti-coagulation factor antibodies as long-lasting protective agents)

IT Blood coagulation  
(disseminated intravascular, thrombosis assocd. with; use of anti-coagulation factor antibodies as long-lasting protective agents)

IT Lung, disease  
(embolism, thrombosis assocd. with; use of anti-coagulation factor antibodies as long-lasting protective agents)

IT Heart, disease  
(infarction, thrombosis assocd. with; use of anti-coagulation factor antibodies as long-lasting protective agents)

IT Antibodies  
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(monoclonal; use of anti-coagulation factor antibodies as long-lasting protective agents)

IT Brain, disease  
(stroke, thrombosis assocd. with; use of anti-coagulation factor antibodies as long-lasting protective agents)

IT Kidney, disease  
Prosthetic materials and Prosthetics  
(thrombosis assocd. with; use of anti-coagulation factor antibodies as long-lasting protective agents)

IT Animal  
Platelet (blood)  
Sepsis  
Thrombosis  
(use of anti-coagulation factor antibodies as long-lasting protective agents)

IT Antibodies  
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(use of anti-coagulation factor antibodies as long-lasting protective agents)

IT Blood-coagulation factors  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(use of anti-coagulation factor antibodies as long-lasting protective agents)

IT Thrombosis  
(venous, deep; use of anti-coagulation factor antibodies as long-lasting protective agents)

IT 9001-24-5, Blood coagulation factor V 9001-25-6, Blood coagulation factor VII 9001-27-8, Blood coagulation factor VIII 9001-28-9, Blood coagulation factor IX 9001-29-0, Blood coagulation factor X 9002-04-4, Thrombin 9002-05-5, Blood coagulation factor Xa 9013-55-2, Blood coagulation factor XI 37203-61-5, Blood coagulation factor XIa 37316-87-3, Blood coagulation factor IXa 65312-43-8, Blood

**Xa inhibitors** such as those described in the publications identified above under Background of the Invention.  
TI Inhibitors of factor Xa with a neutral P1 specificity group  
AN 1999:160040 USPATFULL  
PI US 5998424 19991207

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L10 ANSWER 19 OF 24 USPATFULL  
DETD . . . so as to provide the desired therapeutic effect. Other anticoagulant agents (or coagulation inhibitory agents) that may be used

in **combination** with the compounds of this invention include **warfarin** and **heparin**, as well as other factor **Xa inhibitors** such as those described in the publications identified above under Background of the Invention.  
TI .alpha.-branched anilines, toluenes, and analogs thereof as factor Xa inhibitors  
AN 1999:99692 USPATFULL  
PI US 5942544 19990824

L10 ANSWER 20 OF 24 USPATFULL  
DETD Other anticoagulant agents (or coagulation inhibitory agents) that may be used in **combination** with the compounds of this invention include **warfarin** and **heparin**, as well as other Factor **Xa inhibitors** such as those described in the publications identified above under Background of the Invention.  
TI Isoxazoline, isothiazoline and pyrazoline factor Xa inhibitors  
AN 1999:96369 USPATFULL  
PI US 5939418 19990817

L10 ANSWER 21 OF 24 USPATFULL  
DETD . . . so as to provide the desired therapeutic effect. Other anticoagulant agents (or coagulation inhibitory agents) that may be used in **combination** with the compounds of this invention include **warfarin** and **heparin**, as well as other factor **Xa inhibitors** such as those described in the publications identified above under Background of the Invention.  
TI N-(amidinophenyl) cyclourea analogs as factor XA inhibitors  
AN 1999:81827 USPATFULL  
PI US 5925635 19990720

L10 ANSWER 22 OF 24 USPATFULL  
SUMM The compositions and methods of the present invention comprising fibrinogen receptor antagonists are useful in **combination** with procedures for treating patients with other anticoagulants (e.g. thrombin inhibitors such as heparin and Factor Xa inhibitors such as warfarin), thrombolytic agents (e.g. streptokinase and tissue plasminogen activator), and platelet antiaggregation agents (e.g. **aspirin** and dipyridamole).  
TI Methods for administering integrin receptor antagonists  
AN 1999:53625 USPATFULL  
PI US 5900414 19990504

L10 ANSWER 23 OF 24 USPATFULL  
DETD . . . so as to provide the desired therapeutic effect. Other anticoagulant agents (or coagulation inhibitory agents) that may be used in **combination** with the compounds of this invention include **warfarin** and **heparin**, as well as other factor **Xa inhibitors** such as those described in the

publications identified above under Background of the Invention.  
TI Amidinoindoles, amidinoazoles, and analogs thereof  
AN 1999:37302 USPATFULL  
PI US 5886191 19990323

L10 ANSWER 24 OF 24 USPATFULL

DETD These compounds may be used alone or in **combination** with other diagnostic, anticoagulant, antiplatelet or fibrinolytic agents. For example adjunctive administration of factor **Xa inhibitors** with standard **heparin**, low molecular weight **heparin**, direct thrombin inhibitors (i.e. hirudin), **aspirin**, fibrinogen receptor antagonists, streptokinase, urokinase and/or tissue plasminogen activator may result in greater antithrombotic or thrombolytic efficacy or efficiency. The . . .  
TI Substituted (sulfinic acid, sulfonic acid, sulfonylamino or sulfinylamino) N-[(aminoiminomethyl)phenylalkyl]-azaheterocyclylamide compounds  
AN 97:22796 USPATFULL  
PI US 5612353 19970318

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L10 ANSWER 1 OF 24 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:645898 CAPLUS  
DOCUMENT NUMBER: 133:232835  
TITLE: Treatment of thrombosis by combined use of a factor xa inhibitor and aspirin, tissue plasminogen activator (TPA), a GPIIb/IIIa antagonist, low molecular weight heparin or heparin  
INVENTOR(S): Wong, Pancras C.  
PATENT ASSIGNEE(S): Du Pont Pharmaceuticals Company, USA  
SOURCE: PCT Int. Appl., 38 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000053264	A1	20000914	WO 2000-US6451	20000310
W: AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRIORITY APPLN. INFO.:			US 1999-123815 P 19990311	
REFERENCE COUNT:			10	
REFERENCE(S):			(1) Boehringer Ingelheim Pharma; DE 19816983 A 1999 CAPLUS	

(2) Cor Therapeutics Inc; WO 9640744 A 1996 CAPLUS  
(3) Du Pont Merck Pharma; WO 9514683 A 1995 CAPLUS  
(4) Du Pont Merck Pharma; WO 9828269 A 1998 CAPLUS  
(5) Hamilton Civic Hospitals Res; EP 0735050 A 1996 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L10 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2001 ACS

IT 9002-05-5, Factor **xa**

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(**inhibitors**; antithrombotic formulation **combining**  
**aspirin** with an anti-Xa oligosaccharide)

TI Antithrombotic formulation combining aspirin with an anti-Xa oligosaccharide

AN 1999:458944 CAPLUS

DN 131:78465

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BR 9701313	A	19981117	BR 1997-1313	19970317
AU 698456	B2	19981029	AU 1997-16319	19970314
AU 9716319	A1	19980917		

L10 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2001 ACS

IT 9002-05-5, Coagulation factor **Xa**

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(**inhibitors**; antithrombotics contg. **aspirin** and an  
anti-Xa oligosaccharide and use of anti-Xa oligosaccharides in  
**combination** with **aspirin**)

TI Compositions containing an association of aspirin and an anti-Xa oligosaccharide and use of anti-Xa oligosaccharide optionally in combination with aspirin

AN 1999:401026 CAPLUS

DN 131:35871

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
AU 698456	B2	19981029	AU 1997-16319	19970314
AU 9716319	A1	19980917		
BR 9701313	A	19981117	BR 1997-1313	19970317

L11 ANSWER 7 OF 17 USPATFULL

SUMM . . . inhibit HIV infection or treat the symptoms of HIV infection in

a host. The combination of compounds is preferably a **synergistic** combination. Synergy, as described for example by Chou and Talalay,

Adv.

Enzyme Regul. 22:27-55 (1984), occurs when the effect (in. . . combination is greater than the additive effect of the compounds when administered alone as a single agent. In general, a **synergistic** effect is most clearly demonstrated at suboptimal concentrations of the compounds. Synergy can be in terms of lower cytotoxicity, increased.

DETD

. . . Other anticoagulant agents (or coagulation inhibitory agents) that may be used in combination with the compounds of this invention include **warfarin** and **heparin**, as well as other factor **Xa inhibitors** such as those described in the publications identified above under Background of the Invention.

DETD

. . . may be reduced relative to the usual dosage of the agent when administered alone, in view of the additive or **synergistic** effect of the therapeutic agents when administered in combination.

ACCESSION NUMBER: 2000:57785 USPATFULL

TITLE: 6-membered aromatics as factor Xa inhibitors

INVENTOR(S): Pruitt, James Russell, Landenberg, PA, United States

States Pinto, Donald Joseph Phillip, Newark, DE, United

States

Quan, Mimi Lifan, Newark, DE, United States

Wexler, Ruth Richmond, Wilmington, DE, United States

PATENT ASSIGNEE(S): Dupont Pharmaceuticals, Wilmington, DE, United States (U.S. corporation)



L11 ANSWER 6 OF 17 USPATFULL

SUMM . . . . Sci. USA 84:6899-6903, 1987), and this amplification is correlated with poor patient prognosis. Simultaneous overexpression of p185.sup.neu and the EGFR **synergistically transforms rodent**

fibroblasts and this condition is often observed in human cancers. Finally, HER3 expression is amplified in a variety. . . .

DETD . . . . thrombin inhibitors can be co-administered with suitable anti-coagulation agents or thrombolytic agents such as plasminogen activators or streptokinase to achieve **synergistic** effects in the treatment of various vascular pathologies. For example, thrombin inhibitors enhance the efficiency of tissue plasminogen activator-mediated thrombolytic. . . .

DETD . . . . they are useful for the isolation of mammalian serum from the blood they may alternatively contain clot-inhibiting additives (such as **heparin** salts, EDTA salts, citrate salts or oxalate salts), in which case, they are useful for the isolation of mammalian plasma from the blood. The compounds of the present invention are potent **inhibitors** of factor **Xa** or thrombin, and as such, can be incorporated into blood collection tubes to prevent clotting of the mammalian blood drawn.

ACCESSION NUMBER: 2000:121539 USPATFULL

TITLE: Methods for regulating transcription factors

INVENTOR(S): Qabar, Maher N., Redmond, WA, United States  
McMillan, Michael K., Bellevue, WA, United States  
Kahn, Michael S., Kirkland, WA, United States  
Tulinsky, John E., Seattle, WA, United States  
Ogbu, Cyprian O., Bellevue, WA, United States  
Mathew, Jessymol, Bellevue, WA, United States

PATENT ASSIGNEE(S): Molecumetics Ltd., Bellevue, WA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6117896	20000912
APPLICATION INFO.:	US 1998-22934	19980212 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1997-797915, filed on 10 Feb 1997, now abandoned And a continuation-in-part of Ser. No. US 692420	

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-47067	19970519 (60)
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Higel, Floyd D.	
LEGAL REPRESENTATIVE:	Seed Intellectual Property Law Group PLLC	
NUMBER OF CLAIMS:	34	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	7 Drawing Figure(s); 6 Drawing Page(s)	
LINE COUNT:	4501	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 5 OF 17 USPATFULL

SUMM . . . be administered in combination with one or more additional therapeutic agents selected from: anti-coagulant or coagulation inhibitory agents, such as **heparin** or **warfarin**; anti-platelet or platelet inhibitory agents, such as **aspirin**, piroxicam, ticlopidine, or clopidogrel; factor **Xa inhibitors**; thrombin inhibitors such as boro-peptides, hirudin or argatroban; or thrombolytic or fibrinolytic agents, such as plasminogen activators, anistreplase, urokinase, or streptokinase.

SUMM . . . margin of safety for each component when used as a single agent. Such combination therapies may be employed to achieve **synergistic** or additive therapeutic effects for the treatment of thromboembolic disorders.

DETD . . . may be reduced relative to the usual dosage of the agent when administered alone, in view of the additive or **synergistic** effect which would be obtained as a result of addition of further agents

in accordance with the present invention.

ACCESSION NUMBER: 2000:134898 USPATFULL  
TITLE: Integrin receptor antagonists  
INVENTOR(S): Wityak, John, West Grove, PA, United States  
Tobin, Aleksandra Ewa, Lincoln University, PA, United States  
PATENT ASSIGNEE(S): DuPont Pharmaceuticals, Wilmington, DE, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6130231	20001010
APPLICATION INFO.:	US 1997-980016	19971126 (8)

NUMBER	DATE
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L11 ANSWER 7 OF 17 USPATFULL

SUMM . . . inhibit HIV infection or treat the symptoms of HIV infection  
in

a host. The combination of compounds is preferably a **synergistic**  
combination. Synergy, as described for example by Chou and Talalay,

Adv.

Enzyme Regul. 22:27-55 (1984), occurs when the effect (in. . .  
combination is greater than the additive effect of the compounds when  
administered alone as a single agent. In general, a **synergistic**  
effect is most clearly demonstrated at suboptimal concentrations of the  
compounds. Synergy can be in terms of lower cytotoxicity, increased.

DETD . . . Other anticoagulant agents (or coagulation inhibitory agents)  
that may be used in combination with the compounds of this invention  
include **warfarin** and **heparin**, as well as other  
factor **Xa inhibitors** such as those described in the  
publications identified above under Background of the Invention.

DETD . . . may be reduced relative to the usual dosage of the agent when  
administered alone, in view of the additive or **synergistic**  
effect of the therapeutic agents when administered in combination.

ACCESSION NUMBER: 2000:57785 USPATFULL

TITLE: 6-membered aromatics as factor Xa inhibitors

INVENTOR(S): Pruitt, James Russell, Landenberg, PA, United States  
Pinto, Donald Joseph Phillip, Newark, DE, United

States

PATENT ASSIGNEE(S): Quan, Mimi Lifen, Newark, DE, United States  
Wexler, Ruth Richmond, Wilmington, DE, United States  
Dupont Pharmaceuticals, Wilmington, DE, United States  
(U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6060491	20000509
APPLICATION INFO.:	US 1998-99663	19980618 (9)

L11 ANSWER 11 OF 17 USPATFULL

DETD . . . thrombin inhibitors can be co-administered with suitable anti-coagulation agents or thrombolytic agents such as plasminogen activators or streptokinase to achieve synergistic effects in the treatment of various ascular pathologies. For example, thrombin inhibitors enhance the efficiency of tissue plasminogen activator-mediated thrombolytic. . .

DETD . . . they are useful for the isolation of mammalian serum from the blood they may alternatively contain clot-inhibiting additives (such as heparin salts, EDTA salts, citrate salts or oxalate salts), in which case, they are useful for the isolation of mammalian plasma from the blood. The compounds of the present invention are potent inhibitors of factor Xa or thrombin, and as such, can be incorporated into blood collection tubes to prevent clotting of the mammalian blood drawn. . .

ACCESSION NUMBER: 2000:12794 USPATFULL

TITLE: .beta.-sheet mimetics and use thereof as protease inhibitors

INVENTOR(S): Kahn, Michael, Kirkland, WA, United States

PATENT ASSIGNEE(S): Molecumetics, Ltd., Bellevue, WA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6020331	20000201
APPLICATION INFO.:	US 1998-9386	19980120 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-624695, filed on 25 Mar 1996, now abandoned which is a	
continuation-in-part	of Ser. No. US 1995-549006, filed on 27 Oct 1995, now abandoned which is a continuation-in-part of Ser. No. US 1995-410518, filed on 24 Mar 1995, now abandoned	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Woodward,	

L11 ANSWER 16 OF 17 USPATFULL

DETD . . . Other anticoagulant agents (or coagulation inhibitory agents) that may be used in combination with the compounds of this invention include warfarin and heparin, as well as other

factor Xa inhibitors such as those described in the publications identified above under Background of the Invention.

DETD . . . may be reduced relative to the usual dosage of the agent when administered alone, in view of the additive or **synergistic** effect of the therapeutic agents when administered in combination.

ACCESSION NUMBER: 1999:37302 USPATFULL

TITLE: Amidinoindoles, amidinoazoles, and analogs thereof

INVENTOR(S): Dominguez, Celia, Newark, DE, United States

Han, Qi, Wilmington, DE, United States

Duffy, Daniel Emmett, Wilmington, DE, United States

Park, Jeongsook Maria, Bear, DE, United States

Quán, Mimi Lifén, Newark, DE, United States

Rossi, Karen Anita, Wilmington, DE, United States

Wexler, Ruth Richmond, Wilmington, DE, United States

PATENT ASSIGNEE(S): DuPont Pharmaceuticals Company, Wilmington, DE, United States (U.S. corporation)

NUMBER

DATE

PATENT INFORMATION: US 5886191 19990323

APPLICATION INFO.: US 1997-916736 19970818 (8)

DOCUMENT TYPE: Utility

PRIMARY EXAMINER: Richter, Johann

ASSISTANT EXAMINER: Keating, Dominic

LEGAL REPRESENTATIVE: Vance, David H.

NUMBER OF CLAIMS: 8

EXEMPLARY CLAIM: 1

LINE COUNT: 4385

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 17 OF 17 USPATFULL

SUMM . . . aspect of the invention there is provided a diagnostic kit for determining anti-coagulant activity of heparin in a sample, comprising **synergistic** amounts of:

DETD . . . the present invention are based on purified coagulation factors, such as thrombin or Factor Xa, in competing reactions between

a

**heparin** dependent irreversible inhibitor such as a protease and more specifically antithrombin III or **heparin** cofactor II plus **heparin** and a **heparin**-independent irreversible inhibitor for the enzyme such as highly specific peptidyl chloromethyl ketone **inhibitors** of Factor Xa or thrombin, or chromogenic or fluorescent substrates of the two enzymes. Peptidyl para-nitroanilide chromogenic substrate is a preferred substrate. The.

DETD . . . It is contemplated that a diagnostic kit for use in a routine blood testing laboratory or the like would comprise **synergistic** amounts of: a selected coagulation enzyme, generally selected from thrombin and Factor Xa; and irreversible heparin dependent protease inhibitor, such.

ACCESSION NUMBER: 94:37852 USPATFULL

TITLE: Method for measuring heparin

INVENTOR(S): Nesheim, Michael E., Kingston, Canada

Manuel, Reginald P., Sydenham, Canada

PATENT ASSIGNEE(S): Research Corporation Technologies, Inc., Tucson, AZ,  
United States (U.S. corporation).

	NUMBER	DATE
PATENT INFORMATION:	US 5308755	19940503
APPLICATION INFO.:	US 1992-895078	19920608 (7)
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Kepplinger, Esther L.	
ASSISTANT EXAMINER:	Green, Lora M.	
LEGAL REPRESENTATIVE:	Scully, Scott, Murphy & Presser	
NUMBER OF CLAIMS:	4	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Figure(s); 4 Drawing Page(s)	
LINE COUNT:	385	

L10 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2001 ACS

IT 9002-05-5, Factor **xa**

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(**inhibitors**; antithrombotic formulation combining  
**aspirin** with an anti-Xa oligosaccharide)

TI Antithrombotic formulation combining aspirin with an anti-Xa oligosaccharide

AN 1999:458944 CAPLUS

DN 131:78465

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BR 9701313	A	19981117	BR 1997-1313	19970317
	AU 698456	B2	19981029	AU 1997-16319	19970314
	AU 9716319	A1	19980917		

L10 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2001 ACS

IT 9002-05-5, Coagulation factor **Xa**

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(**inhibitors**; antithrombotics contg. **aspirin** and an  
anti-Xa oligosaccharide and use of anti-Xa oligosaccharides in  
**combination with aspirin**)

TI Compositions containing an association of aspirin and an anti-Xa oligosaccharide and use of anti-Xa oligosaccharide optionally in combination with aspirin.

AN 1999:401026 CAPLUS

DN 131:35871

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	AU 698456	B2	19981029	AU 1997-16319	19970314
	AU 9716319	A1	19980917		
	BR 9701313	A	19981117	BR 1997-1313	19970317

L10 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2001 ACS

AB . . . therapy, addnl. administration of vWF, either simultaneously or subsequently, decreases the risk of bleeding. Anticoagulants with which vWF may be **combined** include **heparin** and its derivs.; synthetic low-mol.-wt. thrombin inhibitors; synthetic or recombinant factor **Xa** or factor VII **inhibitors**; blood platelet antagonists or antibodies; and vitamin K antagonists. Fibrinolytics which

may be used with vWF include streptokinase, plasminogen activators, .

TI Therapeutic combination of von Willebrand factor (vWF) with antithrombotics and fibrinolytics

AN 1996:307743 CAPLUS

DN 124:333088

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4437544	A1	19960425	DE 1994-4437544	19941020
	EP 713881	A2	19960529	EP 1995-114846	19950921
	EP 713881	A3	19960821		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	FI 9504964	A	19960421	FI 1995-4964	19951018
	AU 9534304	A1	19960502	AU 1995-34304	19951018
	AU 708670	B2	19990812		
	CN 1128168	A	19960807	CN 1995-118715	19951018
	US 5571784	A	19961105	US 1995-544867	19951018
	CA 2160975	AA	19960421	CA 1995-2160975	19951019
	NO 9504175	A	19960422	NO 1995-4175	19951019

ZA 9508838	A	19960513	ZA 1995-8838	19951019
JP 08208504	A2	19960813	JP 1995-270785	19951019
HU 73762	A2	19960930	HU 1995-3031	19951020

L10 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2001 ACS

AB . . . of a series of bovine pancreatic trypsin inhibitor mutants (BPTI, aprotinin) 4C2, 7L22, 5L15, 5L15-PEG, 6L15 and 5L84 with a **combined inhibitory** activity on factor **Xa**, factor VIIa-tissue factor complex, factor XIa and plasma kallikrein were compared to rTAP, r-hirudin, **heparin** and enoxaparin in a platelet rich thrombosis model in hamsters. Platelet dependent thrombus deposition was quantified by dedicated image anal..

TI Characterization of a novel series of aprotinin-derived anticoagulants. II. Comparative antithrombotic effects on primary thrombus formation in vivo

AN 1995:796978 CAPLUS

DN 123:246407

L10 ANSWER 6 OF 24 USPATFULL

DETD . . . so as to provide the desired therapeutic effect. Other anticoagulant agents (or coagulation inhibitory agents) that may be used in **combination** with the compounds of this invention include **warfarin** and **heparin**, as well as other factor **Xa inhibitors** such as those described in the publications identified above under Background of the Invention.

TI Benzimidazolinones, benzoxazolinones, benzopiperazinones, indanones, and derivatives thereof as inhibitors of factor **Xa**.

AN 2001:44255 USPATFULL

PI US 6207697 20010327

L10 ANSWER 7 OF 24 USPATFULL

DETD . . . so as to provide the desired therapeutic effect. Other anticoagulant agents (or coagulation inhibitory agents) that may be used in **combination** with the compounds of this invention include **warfarin** and **heparin**, as well as other factor **Xa inhibitors** such as those described in the publications identified above under Background of the Invention.

TI Disubstituted pyrazolines and triazolines as factor Xa inhibitors

AN 2001:25924 USPATFULL

PI US 6191159 20010220

L10 ANSWER 8 OF 24 USPATFULL

DETD . . . so as to provide the desired therapeutic effect. Other anticoagulant agents (or coagulation inhibitory agents) that may be used in **combination** with the compounds of this invention include **warfarin** and **heparin**, as well as other factor **Xa inhibitors** such as those described in the publications identified above under Background of the Invention.

TI Phenyl-isoxazoles as factor XA Inhibitors

AN 2001:22243 USPATFULL

PI US 6187797 20010213

L10 ANSWER 9 OF 24 USPATFULL

DETD These compounds may be used alone or in **combination** with other diagnostic, anticoagulant, antiplatelet or fibrinolytic agents. For



TI antithrombotic or thrombolytic efficacy or efficiency. The. . .  
AN Substituted n-[(aminoiminomethyl or aminomethyl)phenyl]propyl amides  
PI 2000:80775 USPATFULL  
US 6080767 20000627

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L10 ANSWER 14 OF 24 USPATFULL

DETD . . . so as to provide the desired therapeutic effect. Other  
anticoagulant agents (or coagulation inhibitory agents) that may be  
used

in **combination** with the compounds of this invention include  
**warfarin** and **heparin**, as well as other factor  
**Xa inhibitors** such as those described in the  
publications identified above under Background of the Invention.  
TI 6-membered aromatics as factor Xa inhibitors  
AN 2000:57785 USPATFULL  
PI US 6060491 20000509

L10 ANSWER 15 OF 24 USPATFULL

DETD . . . so as to provide the desired therapeutic effect. Other  
anticoagulant agents (or coagulation inhibitory agents) that may be  
used

in **combination** with the compounds of this invention include  
**warfarin** and **heparin**, as well as other factor  
**Xa inhibitors** such as those described in the  
publications identified above under Background of the Invention.  
TI Amidinophenyl-pyrrolidines, -pyrrolines, and -isoxazolidines and  
derivatives thereof  
AN 2000:54125 USPATFULL  
PI US 6057342 20000502

L10 ANSWER 16 OF 24 USPATFULL

DETD . . . so as to provide the desired therapeutic effect. Other  
anticoagulant agents (or coagulation inhibitory agents) that may be  
used

in **combination** with the compounds of this invention include  
**warfarin** and **heparin**, as well as other factor  
**Xa inhibitors** such as those described in the  
publications identified above under Background of the Invention.  
TI Amidinoindoles, amidinoazoles, and analogs thereof  
AN 2000:37813 USPATFULL  
PI US 6043257 20000328

L10 ANSWER 17 OF 24 USPATFULL

DETD . . . so as to provide the desired therapeutic effect. Other  
anticoagulant agents (or coagulation inhibitory agents) that may be  
used

in **combination** with the compounds of this invention include  
**warfarin** and **heparin**, as well as other factor  
**Xa inhibitors** such as those described in the  
publications identified above under Background of the Invention.  
TI Nitrogen containing heteroaromatics as factor Xa inhibitors  
AN 2000:12820 USPATFULL  
PI US 6020357 20000201

L10 ANSWER 18 OF 24 USPATFULL

DETD . . . so as to provide the desired therapeutic effect. Other  
anticoagulant agents (or coagulation inhibitory agents) that may be  
used

in **combination** with the compounds of this invention include  
**warfarin** and **heparin**, as well as other factor

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS  
RN 50-78-2 REGISTRY  
CN Benzoic acid, 2-(acetyloxy)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 2-(Acetyloxy)benzoic acid  
CN 2-Acetoxybenzoic acid  
CN 2-Carboxyphenyl acetate  
CN A.S.A. Empirin  
CN AC 5230  
CN Acenterine  
CN Acesal  
CN Acesan  
CN Acetard  
CN Aceticyl  
CN Acetilum acidulatum  
CN Acetisal  
CN Acetol  
CN Acetophen  
CN Acetosal  
CN Acetosalic acid  
CN Acetosalin  
CN Acetylin  
CN Acetylsal  
CN Acetylsalicylic acid  
CN Acetysal  
CN Acidum acetylsalicylicum  
CN Acisal  
CN Acylpyrin  
CN ASA  
CN Asagran  
CN **Aspirin**  
CN Aspirin Protect 100  
CN Aspirin Protect 300  
CN Aspirina 03  
CN Aspro  
CN Aspro Clear  
CN Aspropharm  
CN Asteric  
CN Benaspir  
CN Bialpirina  
CN Caprin  
CN Colfarit  
CN Dolean pH 8  
CN Doril  
CN Duramax  
CN ECM  
CN Ecotrin  
CN Empirin  
CN Endosprin  
CN Endydol  
CN Enterosarine  
CN Entrophen  
CN Globentyl  
CN Globoid

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for  
DISPLAY

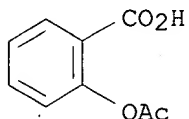
FS 3D CONCORD  
DR 11126-35-5, 11126-37-7, 98201-60-6, 2349-94-2, 26914-13-6  
MF C9 H8 O4  
CI COM  
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,

BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,  
CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM\*,  
DIOGENES, DIPPR\*, DRUGU, EMBASE, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT,  
IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*,  
PHAR, PHARMASEARCH, PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER,  
TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

14341 REFERENCES IN FILE CA (1967 TO DATE)

282 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

14361 REFERENCES IN FILE CAPLUS (1967 TO DATE)

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=>

L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS

AN 1993:485705 CAPLUS

DN 119:85705

TI Comparative effects of enoxaparin and heparin on arterial and venous clot lysis with alteplase in dogs

AU Stassen, Jean Marie; Rapold, Hans J.; Vanlinthout, Ingrid; Collen, Desire

CS ~~Cent. Thromb. Vasc. Res., Univ. Leuven, Louvain, B-3000, Belg.~~

SO Thromb. Haemostasis (1993), 69(5), 454-9

CODEN: THHADQ; ISSN: 0340-6245

DT Journal

LA English

CC 1-8 (Pharmacology)

AB The effects of enoxaparin and heparin on arterial and venous thrombolysis induced with alteplase (Actilyse) were compared in a randomized blind study in dogs pretreated with **aspirin**. The dogs were pretreated with **aspirin** because it is widely used in assocn. with thrombolysis in patients with acute myocardial infarction. Enoxaparin and heparin were equipotent in terms of the arterial patency time when the dose was expressed in anti-Xa activity. When the dose of anticoagulant was expressed in anti-IIa, enoxaparin was significantly more potent than heparin. Conversely, with respect to venous clot lysis, enoxaparin was equipotent to heparin on the basis of their anti-IIa activity, but heparin was more potent than enoxaparin on the basis of their anti-Xa activity.

ST alteplase blood clot lysis enoxaparin heparin

IT Anticoagulants and Antithrombotics

(enoxaparin and heparin, alteplase thrombolysis enhancement by, comparison of)

IT Drug interactions

(**synergistic**, of enoxaparin and heparin, with alteplase-induced thrombolysis)

IT 9005-49-6, Enoxaparin, biological studies

RL: BIOL (Biological study)

(alteplase thrombolysis potentiation by fractionated and unfractionated)

IT 9002-04-4, Thrombin 9002-05-5, Blood-coagulation **factor**

**Xa**

RL: BIOL (Biological study)

(in alteplase thrombolysis enhancement by enoxaparin and heparin, arterial patency and venous clot lysis in relation to)

IT 105857-23-6, Alteplase

RL: BIOL (Biological study)

(thrombolysis from, enoxaparin and heparin enhancement of, comparison of)

=>

coagulation factor VIIa 65522-14-7, Blood coagulation factor Va  
72175-66-7, Blood coagulation factor VIIa  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(use of anti-coagulation factor antibodies as long-lasting protective  
agents)

IT 50-78-2, Acetylsalicylic acid

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(use of anti-coagulation factor antibodies as long-lasting protective  
agents)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Bajaj; Journal of Biological Chemistry 1985, V260(21), P11574 CAPLUS
- (2) Gorog; American Journal of Clinical Pathology 1986, V86(3), P311 CAPLUS
- (3) Harker, A; Book of Abstracts, 212th ACS National Meeting, abstract MEDI 109  
1996
- (4) Sallah, S; Annals of Hematology 1997, V75, P1 CAPLUS
- (5) Shapiro; Thrombosis and Haemostasis 1996, V75(1), P30 CAPLUS
- (6) Smithkline Beecham Corporation; WO 9726010 A1 1997 CAPLUS

L28 ANSWER 21 OF 29 CAPLUS COPYRIGHT 2002 ACS

AN 1999:458944 CAPLUS

DN 131:78465

TI Antithrombotic formulation combining **aspirin** with an anti-  
**Xa** oligosaccharide

IN Cariou, Roger; Stiekema, Jacobus Christianus Johannes

PA Sanofi, Fr.; Akzo Nobel N.V.

SO Braz. Pedido PI, 19 pp.

CODEN: BPXXDX

DT Patent

LA Portuguese

IC ICM C07H017-04

ICS C07C065-00; A61K031-19; A61K031-715

CC 63-6 (Pharmaceuticals)

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BR 9701313	A	19981117	BR 1997-1313	19970317
	<del>AU 698456</del>	B2	19981029	AU 1997-16319	19970314
	AU 9716319	A1	19980917		
PRAI	BR 1997-1313		19970317		

AB A synthetic oligosaccharide is disclosed which is a selective inhibitor of  
blood coagulation factor **Xa** and acts via antithrombin III, alone  
or in combination with **aspirin**, and can be used to prevent or  
treat thromboembolic diseases related to percutaneous transluminal  
angioplasty. The oligosaccharide of the invention is O-(2-deoxy-2-  
sulfoamino-6-O-sulfo-.alpha.-D-glucopyranosyl)-(1.fwdarw.4)-O-(.beta.-D-  
glucopyranosyluronic acid)-(1.fwdarw.4)-O-(2-deoxy-2-sulfoamino-3,6-di-O-  
sulfo-.alpha.-D-glucopyranosyl)-(1.fwdarw.4)-O-(2-O-sulfo-.alpha.-  
idopyranosyluronic acid)-(1.fwdarw.4)-1-O-methyl-2-O-sulfoamino-6-O-sulfo-  
.alpha.-D-glucopyranoside decasodium salt.

ST antiXa oligosaccharide antithrombotic formulation **aspirin**

IT Artery

(angioplasty; antithrombotic formulation combining **aspirin**  
with an anti-**Xa** oligosaccharide)

IT Anticoagulants

(antithrombotic formulation combining **aspirin** with an anti-  
**Xa** oligosaccharide)

IT Oligosaccharides, biological studies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); PEP (Physical, engineering or chemical process); THU  
(Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(antithrombotic formulation combining **aspirin** with an anti-  
**Xa** oligosaccharide)

IT Drug delivery systems  
(injections, i.v.; antithrombotic formulation combining **aspirin**  
with an anti-**Xa** oligosaccharide)

IT Drug delivery systems  
(injections, s.c.; antithrombotic formulation combining **aspirin**  
with an anti-**Xa** oligosaccharide)

IT 104993-28-4 114870-03-0

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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(antithrombotic formulation combining **aspirin** with an anti-**Xa** oligosaccharide)

IT 50-78-2, **Aspirin**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(antithrombotic formulation combining **aspirin** with an anti-**Xa** oligosaccharide)

IT 9000-94-6, Antithrombin III

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(antithrombotic formulation combining **aspirin** with an anti-**Xa** oligosaccharide)

IT 9002-05-5, Factor **xa**

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitors; antithrombotic formulation combining **aspirin**  
with an anti-**Xa** oligosaccharide)

L28 ANSWER 24 OF 29 CAPLUS COPYRIGHT 2002 ACS

AN 1999:7809 CAPLUS

DN 130:61081

TI Compositions for treating and preventing arterial thrombosis and use of a factor **Xa** inhibitor alone or combined with a platelet aggregation inhibitor

IN Bernat, Andre; Herbert, Jean-Marc; Petitou, Maurice; Van Amsterdam, Ronald

PA Sanofi, Fr.; Akzo Nobel N.V.

SO PCT Int. Appl., 90 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K031-00

ICS A61K031-70; A61K031-40; A61K031-70; A61K031-60; A61K031-435;  
A61K031-445; A61K031-40; A61K031-60; A61K031-435; A61K031-445

CC 1-8 (Pharmacology)

Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9856365	A1	19981217	WO 1998-FR1172	19980609
	W: AU, BR, BY, CA, CN, CZ, EE, HU, ID, IL, IS, JP, KR, LK, LT, LV, MX, NO, NZ, PL, RU, SG, SI, SK, TR, UA, US, VN, YU				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	FR 2764511	A1	19981218	FR 1997-7368	19970613
	FR 2764511	B1	20000908		
	AU 9879246	A1	19981230	AU 1998-79246	19980609
	AU 728826	B2	20010118		
	EP 986376	A1	20000322	EP 1998-929521	19980609
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	BR 9810520	A	20000919	BR 1998-10520	19980609
	JP 2002504110	T2	20020205	JP 1999-501765	19980609
	ZA 9805137	A	19990107	ZA 1998-5137	19980612
	NO 9906137	A	20000214	NO 1999-6137	19991210
PRAI	FR 1997-7368	A	19970613		
	WO 1998-FR1172	W	19980609		
AB	Direct or indirect selective inhibitors of factor <b>Xa</b> acting via antithrombin III, alone or combined with one or several platelet aggregation inhibitors, are used for prepg. medicines for preventing or treating arterial thromboembolism. Also provided are pharmaceutical compns. contg. one or several direct or indirect selective inhibitors of factor <b>Xa</b> acting via antithrombin III in assocn. with one or several platelet aggregation inhibitors, and, optionally one or several pharmaceutically acceptable carriers.				
ST	antithrombotic factor <b>Xa</b> inhibitor platelet aggregation inhibitor; arterial thrombosis factor <b>Xa</b> inhibitor platelet aggregation inhibitor; thromboembolism arterial factor <b>Xa</b> inhibitor platelet aggregation inhibitor				
IT	Prosthetic materials and Prosthetics				
	((endo)vascular; factor <b>Xa</b> inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)				
IT	Heart, disease				
	(angina pectoris, unstable; factor <b>Xa</b> inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)				
IT	Artery				
	-(angioplasty; factor <b>Xa</b> inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)				
IT	Thrombosis				
	(arterial; factor <b>Xa</b> inhibitor alone or combined with				

platelet aggregation inhibitor for treatment of arterial thrombosis)

IT Heart, disease  
(auricular fibrillation; factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

IT Brain, disease  
(cerebrovascular; factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

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IT Mental disorder  
(dementia, ischemic; factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

IT Artery  
(endarterectomy; factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

IT Anticoagulants  
Cardiovascular agents  
Diabetes mellitus  
Drug delivery systems  
Drug interactions  
Platelet aggregation inhibitors  
(factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

IT Oligosaccharides, biological studies  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

IT Dialysis  
(hemodialysis; factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

IT Brain, disease  
Heart, disease  
(infarction; factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

IT Ischemia  
(ischemic dementia; factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

IT Artery, disease  
(peripheral; factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

IT Artery, disease  
(restenosis; factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

IT Thrombosis  
(rethrombosis; factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

IT Atherosclerosis  
(thromboembolic disorder assocd. with; factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

IT Embolism  
(thromboembolism; factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

IT Integrins  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(.alpha.IIb.beta.3, antagonists; factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

IT 50-78-2, Aspirin 55142-85-3, Ticlopidine



104993-28-4, SR 90107 113665-84-2, Clopidogrel 114870-03-0  
150612-55-8 180144-61-0 190841-78-2 190841-79-3, SR 121787

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

~~IT 9000-94-6, Antithrombin III~~ **9002-05-5**, Blood coagulation factor

**Xa**

RL: BPR (Biological process); BSU (Biological study, unclassified);

**BIOL (Biological study); PROC (Process)**

(factor **Xa** inhibitor alone or combined with platelet aggregation inhibitor for treatment of arterial thrombosis)

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Bernat; Fibrinolysis 1996, V10(3), P151 CAPLUS
- (2) Cadroy, Y; Thrombosis and Haemostasis V70(4), P631 CAPLUS
- (3) Choay; EP 0138632 A 1985 CAPLUS
- (4) Daiichi Seiyaku Co; EP 0540051 A 1993 CAPLUS
- (5) Fitzgerald; Expert Opin Ther Patents 1995, V5(11), P1143
- (6) Fukuda; JPN J Pharmacol 1996, V71(sup 1), P327p
- (7) Herault; Blood Coagul Fibrinolysis 1997, V8(3), P206 CAPLUS
- (8) Herbert; Cardiovasc Drug Rev 1997, V15(1), P1 CAPLUS
- (9) Herbert; Circ Res 1996, V79(3), P590 CAPLUS
- (10) Herbert; J Pharmacol Exp Ther 1996, V276(3), P1030 CAPLUS
- (11) Kaiser; Clin Appl Thromb Hemost 1997, V3(1), P16
- (12) Kaiser, B; Blood 1997, V90(10), P97B
- (13) Kunitada; Curr Pharm Design 1996, V2(5), P531 CAPLUS
- (14) Savi; Thromb Haemost 1997, P1599
- (15) Schiele, F; Circulation 1996, V94(8)
- (16) van Amsterdam; Thromb Haemost 1997, P2834
- (17) Verstraete; Drugs 1995, V49(6), P856 CAPLUS
- (18) Vogel; Thromb Haemost 1997, V77(1), P183 CAPLUS
- (19) Vuilleminot, A; European Heart Journal 1997, V18, P622
- (20) Yamashita; Thromb Res 1997, V85(1), P45 CAPLUS
- (21) Zandberg; Fibrinolysis 1996, V10(supl 3), P24

L28 ANSWER 22 OF 29 CAPLUS COPYRIGHT 2002 ACS

AN 1999:401026 CAPLUS

DN 131:35871

TI Compositions containing an association of **aspirin** and an anti-**Xa** oligosaccharide and use of anti-**Xa** oligosaccharide optionally in combination with **aspirin**

IN Cariou, Roger; Stiekema, Jacobus

PA Sanofi S. A., Neth.; Akzo Nobel N. V.

SO Pat. Specif. (Aust.), 26 pp.

CODEN: ALXXAP

DT Patent

LA English

IC ICM A61K031-60

ICS A61K031-70

CC 63-6 (Pharmaceuticals)

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	AU 698456	B2	19981029	AU 1997-16319	19970314
	AU 9716319	A1	19980917		
	BR 9701313	A	19981117	BR 1997-1313	19970317
PRAI	BR 1997-1313		19970317		

AB A method for treatment or prophylaxis of thromboembolic disease assocd. with percutaneous transluminal angioplasty is disclosed which entails administration of an ED of **aspirin** in addn. to an effective quantity of at least one synthetic pentasaccharide which is a selective inhibitor of factor **Xa** and acts via antithrombin III. The pentasaccharide may be O-methyl-(3,4-di-O-methyl-2,6-di-O-sulfo-.alpha.-D-glucopyranosyl)-(1.fwdarw.4)-O-(3-O-methyl-2-O-sulfo-.beta.-D-glucopyranosyluronic acid)-(1.fwdarw.4)-O-(2,3,6-tri-O-sulfo-.alpha.-D-glucopyranosyl)-(1.fwdarw.4)-O-(3-O-methyl-2-O-sulfo-.alpha.-L-idopyranosyluronic acid)-(1.fwdarw.4)-2,3,6-tri-O-.alpha.-D-glucopyranoside, O-methyl-(2-deoxy-2-sulfoamino-6-O-sulfo-.alpha.-D-glucopyranosyl)-(1.fwdarw.4)-O-(.beta.-D-glucopyranosyluronic acid)-(1.fwdarw.4)-O-(2-deoxy-2-sulfoamino-3,6-di-O-sulfo-.alpha.-D-glucopyranosyl)-(1.fwdarw.4)-O-(2-O-sulfo-.alpha.-L-idopyranosyluronic acid)-(1.fwdarw.4)-2-deoxy-2-sulfoamino-6-O-sulfo-.alpha.-D-glucopyranoside, or O-methyl-(2,3,4-tri-O-methyl-6-O-sulfo-.alpha.-D-glucopyranosyl)-(1.fwdarw.4)-O-(2,3-di-O-methyl-.beta.-D-glucopyranosyluronic acid)-(1.fwdarw.4)-O-(2,3,6-tri-O-sulfo-.alpha.-D-glucopyranosyl)-(1.fwdarw.4)-O-(2,3-di-O-methyl-.alpha.-L-idopyranosyluronic acid)-(1.fwdarw.4)-2,3,6-tri-O-sulfo-.alpha.-D-glucopyranoside or their decasodium salts.

ST **aspirin** antithrombotic pentasaccharide anti **Xa** angioplasty

IT Artery  
(angioplasty, percutaneous transluminal; antithrombotics contg. **aspirin** and an anti-**Xa** oligosaccharide and use of anti-**Xa** oligosaccharides in combination with **aspirin**)

IT Anticoagulants  
(antithrombotics contg. **aspirin** and an anti-**Xa** oligosaccharide and use of anti-**Xa** oligosaccharides in combination with **aspirin**)

IT Oligosaccharides, biological studies  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(antithrombotics contg. **aspirin** and an anti-**Xa** oligosaccharide and use of anti-**Xa** oligosaccharides in combination with **aspirin**)

IT Drug delivery systems

(injections, i.v.; antithrombotics contg. **aspirin** and an anti-**Xa** oligosaccharide and use of anti-**Xa** oligosaccharides in combination with **aspirin**)

IT Drug delivery systems

(injections, s.c.; antithrombotics contg. **aspirin** and an anti-**Xa** oligosaccharide and use of anti-**Xa** oligosaccharides in combination with **aspirin**)

IT Oligosaccharides, biological studies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (pentasaccharides; antithrombotics contg. **aspirin** and an anti-**Xa** oligosaccharide and use of anti-**Xa** oligosaccharides in combination with **aspirin**)

IT Embolism

(thromboembolism; antithrombotics contg. **aspirin** and an anti-**Xa** oligosaccharide and use of anti-**Xa** oligosaccharides in combination with **aspirin**)

IT 50-78-2, **Aspirin** 104993-28-4 114870-03-0, SR 90107A 148147-80-2 162610-17-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (antithrombotics contg. **aspirin** and an anti-**Xa** oligosaccharide and use of anti-**Xa** oligosaccharides in combination with **aspirin**)

IT 9002-05-5, Coagulation factor **Xa**

RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors; antithrombotics contg. **aspirin** and an anti-**Xa** oligosaccharide and use of anti-**Xa** oligosaccharides in combination with **aspirin**)

L28 ANSWER 15 OF 29 CAPLUS COPYRIGHT 2002 ACS

AN 2000:900613 CAPLUS

DN 134:56957

TI Preparation of amino acid derivatives as serine protease inhibitors

IN Liebeschuetz, John Walter; Lyons, Amanda Jane; Murray, Christopher  
William; Rimmer, Andrew David; Young, Stephen Clinton; Camp, Nicholas

Paul; Jones, Stuart Donald; Morgan, Phillip John; Richards, Simon James;  
Wylie, William Alexander; Lively, Sarah Elizabeth; Harrison, Martin James;  
Waszkowycz, Bohdan; Masters, John Joseph; Wiley, Michael John

PA Eli Lilly and Company, USA; Protherics Molecular Design Limited

SO PCT Int. Appl., 350 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C07D211-00

CC 34-2 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 1

FAN.CNT 12

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000076970	A2	20001221	WO 2000-GB2296	20000613
	WO 2000076970	A3	20010719		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,  
CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,  
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,  
LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,  
SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,  
ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,  
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1192135	A2	20020403	EP 2000-938912	20000613
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO

PRAI	GB 1999-13823	A	19990614
	US 1999-142064P	P	19990702
	GB 1999-18741	A	19990809
	GB 1999-29552	A	19991214
	GB 1999-29553	A	19991214
	WO 2000-GB2296	W	20000613

OS MARPAT 134:56957

AB Compds. R2-X-X-Y(Cy)-L-Lp(D)n [R2 represents a 5- or 6-membered arom.  
carbon ring optionally interrupted by a N, O or S ring atom, optionally  
substituted at the 3 and/or 4 position or forms a fused ring system at  
these positions, which is an optionally substituted 5 or 6 membered  
carbocyclic or heterocyclic ring; X is a C, N, O or S atom or a CO, CR1a,  
C(R1a)2 or NR1a group, where R1a represents H, OH, alkoxy, alkyl,  
aminoalkyl, hydroxyalkyl, alkoxyalkyl, alkoxycarbonyl, alkylaminocarbonyl,  
alkoxycarbonylamino, acyloxymethoxycarbonyl or alkylamino optionally  
substituted by OH, alkylamino, alkoxy, oxo, aryl or cycloalkyl; L is an  
org. linker group contg. 1 to 5 backbone atoms selected from C, N, O and  
S, or a branched alkyl or cyclic group; Y is a N atom or a CR1b group (R1b  
defined as for R1a); Cy is an (un)substituted, (un)satd., mono- or  
polycyclic, homo- or heterocyclic group; Lp is a lipophilic org. group; D  
is a hydrogen bond donor group; n = 0-2] were prepd. for use as serine  
protease inhibitors. Compds. of the invention were found to significantly  
elongate the partial thromboplastin time (prothrombin time). Thus,  
1-(3-amino-2-naphthoyl-D-phenylglyciny)-4,4'-bispiperidine was prepd. and  
shown to double the prothrombin time at a concn. of 26 .mu.M.

ST amino acid compd prepn serine protease inhibitor

IT Anticoagulants

(prepn. of amino acid derivs. as serine protease inhibitors)

IT Amino acids, preparation  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of amino acid derivs. as serine protease inhibitors)

IT 313489-33-7P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(prepn. of amino acid derivs. as serine protease inhibitors)

IT	313486-66-7P	313486-67-8P	313486-68-9P	313486-69-0P	313486-70-3P
	313486-71-4P	313486-72-5P	313486-73-6P	313486-74-7P	313486-75-8P
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	313486-81-6P	313486-82-7P	313486-83-8P	313486-84-9P	313486-85-0P
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	313488-96-9P	313488-97-0P	313488-98-1P	313488-99-2P	

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of amino acid derivs. as serine protease inhibitors)

IT 313489-00-8P 313489-01-9P 313489-02-0P 313489-03-1P 313489-04-2P

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313690-70-9P				

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of amino acid derivs. as serine protease inhibitors)

IT 9002-05-5, Factor xa 37259-58-8, Serine protease

RL: BPR (Biological process); BSU (Biological study, unclassified);

BIOL (Biological study); PROC (Process)

(prepn. of amino acid derivs. as serine protease inhibitors)

IT 50-78-2, 2-Acetoxybenzoic acid 51-01-4, 2,4-Diacetoxybenzoic acid 56-41-7, L-Alanine, reactions 56-45-1, L-Serine, reactions 60-34-4, Methylhydrazine 62-53-3, Aniline, reactions 67-64-1, Acetone, reactions 72-19-5, L-Threonine, reactions 75-07-0, Acetaldehyde, reactions 75-31-0, Isopropylamine, reactions 79-03-8, Propanoyl chloride 79-30-1, 2-Methylpropanoyl chloride 79-33-4, s 2-Hydroxypropanoic acid, reactions 89-77-0, 4-Chloroanthranilic acid 93-09-4, 2-Naphthalenecarboxylic acid 96-22-0, 3-Pentanone 97-69-8, n-Acetyl-L-Alanine 99-88-7 100-07-2, 4-Methoxybenzoyl chloride 100-09-4, p-Anisic acid 100-43-6, 4-Vinylpyridine 100-52-7, Benzaldehyde, reactions 103-67-3, n-Methylbenzylamine 103-82-2, Phenylacetic acid, reactions 104-84-7, 4-Methylbenzylamine 106-47-8, 4-Chloroaniline, reactions 107-95-9, .beta.-Alanine 107-97-1, Sarcosine 108-12-3, 3-Methylbutanoyl chloride 108-94-1, Cyclohexanone, reactions 108-95-2, Phenol, reactions 109-00-2, 3-Hydroxypyridine 109-89-7, Diethylamine, reactions 109-96-6, 3-Pyrroline 110-89-4, Piperidine, reactions 120-92-3, Cyclopentanone 122-78-1, Phenylacetaldehyde 123-75-1, Pyrrolidine, reactions 124-40-3, Dimethylamine, reactions 127-06-0, Acetoxime 141-97-9, Ethyl acetoacetate 147-85-3, L-Proline, reactions 150-19-6, 3-Methoxyphenol 150-76-5, 4-Methoxyphenol 156-38-7, 4-Hydroxyphenylacetic acid

312-84-5, D-Serine 338-69-2, D-Alanine 344-25-2, D-Proline 367-12-4,  
 2-Fluorophenol 371-41-5, 4-Fluorophenol 372-20-3, 3-Fluorophenol  
 399-76-8, 1H-Indole-2-carboxylic acid, 5-fluoro- 462-08-8,  
 3-Aminopyridine 496-15-1 496-41-3, 2-Benzofurancarboxylic acid  
 498-94-2, Isonipecotic acid 500-22-1, 3-Pyridinecarboxaldehyde  
 501-81-5, 3-Pyridylacetic acid 543-24-8, n-Acetylglutamine 553-26-4,  
 4,4'-Bipyridine 580-17-6, 3-Aminoquinoline 586-30-1 589-92-4,  
 4-Methylcyclohexanone 614-75-5, 2-Hydroxyphenylacetic acid 615-13-4,  
 2-Indanone 619-80-7, 4-Nitrobenzamide 621-37-4, 3-Hydroxyphenylacetic  
 acid 626-43-7, 3,5-Dichloroaniline 626-58-4, 4-Methylpiperidine  
 626-67-5, 1-Methylpiperidine 645-09-0, 3-Nitrobenzamide 645-65-8,  
 4-Imidazoleacetic acid 766-09-6, 1-Ethylpiperidine 766-79-0,  
 1-Isopropylpiperidine 872-50-4, n-Methyl-2-pyrrolidinone, reactions  
 872-85-5, 4-Pyridinecarboxaldehyde 875-74-1, D-Phenylglycine  
 1072-72-6, Tetrahydro-4h-thiopyran-4-one 1073-29-6, 2-Methylthiophenol  
 1121-60-4, 2-Pyridinecarboxaldehyde 1436-59-5, cis-1,2-  
 Diaminocyclohexane 1445-73-4, 1-Methyl-4-piperidinone 1477-50-5,  
 2-Indolecarboxylic acid 1670-82-2, 6-Indolecarboxylic acid 1734-62-9  
 2043-61-0, Cyclohexanecarboxaldehyde 2065-66-9,  
 Methyltriphenylphosphonium iodide 2217-43-8 2359-60-6 2632-13-5,  
 .alpha.-Bromo-4-methoxyacetophenone 2739-98-2, Ethyl 2-pyridineacetate  
 2799-21-5 2859-67-8, 3-Pyridinepropanol 2879-79-0 3470-53-9  
 3470-54-0 3622-04-6, 2-Benzothiazolecarboxylic acid 3731-52-0,  
 3-Aminomethylpyridine 3731-53-1, 4-Aminomethylpyridine 4066-41-5  
 4318-37-0 4382-54-1 5116-00-7 5326-23-8 5382-16-1,  
 4-Hydroxypiperidine 5464-07-3 5794-88-7, 2-Amino-5-bromobenzoic acid  
 6285-57-0 6314-28-9, Benzo[b]thiophene-2-carboxylic acid 6329-61-9,  
 Decahydroisoquinoline 6457-49-4, 4-Piperidinemethanol 7409-18-9,  
 3-Nitrobenzylamine 7697-29-2, 4-Chloro-3-methylbenzoic acid 10241-97-1  
 10242-08-7 10242-09-8 10242-10-1, 2-Benzofurancarboxylic acid,  
 5-chloro- 10517-21-2 13293-47-5 13771-75-0 14572-89-5,  
 1-(4-Aminophenyl)ethanol 14675-99-1 16136-58-6, 1-Methyl-2-  
 Indolecarboxylic acid 16588-15-1, 2-Chloro-5-nitrobenzamide 16732-73-3  
 17295-26-0 17336-08-2 17336-11-7 17609-52-8 19436-52-3,  
 n-Acetyl-D-Alanine 19727-83-4 19810-31-2, 2-Benzoyloxyacetyl chloride  
 20873-58-9 21296-94-6, 2,3-Dimethyl-5-nitroindole 22620-27-5  
 22818-40-2, D-(4-Hydroxyphenyl)glycine 23995-88-2 24425-40-9  
 24461-61-8, D-Phenylglycine methyl ester 24673-56-1 26018-73-5  
 27489-33-4 28286-79-5, 3-Hydroxymethylbenzoic acid 28356-58-3,  
 4-Pyridylacetic acid 29943-42-8, Tetrahydro-4h-pyran-4-one 30379-55-6  
 32692-19-6, 2,3-Dihydro-5-nitroindole 33125-05-2 36316-71-9,  
 2-Chloropyridine hydrochloride 37908-96-6, 3-Chloro-4-methoxybenzoic  
 acid 40353-34-2 40499-83-0, 3-Hydroxypyrrolidine 50551-61-6  
 50670-64-9, 3-Cyano-4-methylaniline 51673-84-8, Glyoxal, dimethyl acetal  
 54401-85-3, Ethyl 4-pyridineacetate 56613-80-0, r-2-Phenylglycinol  
 56621-48-8 57260-71-6 57479-70-6 60444-56-6 62368-29-0  
 64465-53-8, 4-Fluoro-3-methoxyaniline 64951-06-0, Imidazo 1,2 a  
 pyrimidine 2 carboxylic acid ethyl ester 64987-05-9 69026-14-8,  
 3-Benzoyloxybenzoic acid 70679-89-9 75890-68-5 78619-84-8,  
 4,4'-Bipiperidine dihydrochloride 87120-72-7 88568-95-0 103796-62-9  
 109384-19-2, 1-tert-Butoxycarbonyl-4-piperidinol 111524-95-9  
 117445-22-4 133831-28-4 144222-22-0 156407-78-2 171050-06-9  
 201286-69-3 219508-17-5 313489-97-3 313490-06-1 313490-07-2  
 313490-08-3 313490-26-5 313490-39-0 313490-40-3 313490-41-4  
 313490-80-1 313490-98-1 313493-38-8 313493-40-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of amino acid derivs. as serine protease inhibitors)

IT 89-98-5P, 2-Chlorobenzaldehyde 1200-05-1P 1802-16-0P,  
 3-Pyridinepropanal 5407-51-2P, 2,6-Benzothiazolediamine 5408-04-8P  
 5462-71-5P 5623-81-4P, Cyclopentaneacetaldehyde 7188-38-7P, tert-Butyl  
 isonitrile 15336-72-8P, 4,4'-Bipiperidine 17477-46-2P 40512-48-9P  
 40512-57-0P 41841-16-1P 42965-35-5P 50382-11-1P 50382-30-4P  
 52798-01-3P 54817-91-3P 57591-61-4P 64951-10-6P, Imidazo 1,2 a

pyrimidine 2 carboxylic acid	71420-92-3P	71721-67-0P	71721-69-2P
74864-32-7P	76687-25-7P	76687-26-8P	76687-27-9P
79608-48-3P	84358-13-4P	99767-45-0P	101385-93-7P
102089-75-8P	109431-87-0P	112162-11-5P	117722-19-7P
4-Pyridinepropanal	123855-51-6P	134557-76-9P	137076-22-3P
138891-54-0P	141518-55-0P	142121-93-5P	142121-94-6P
191871-32-6P	214698-07-4P	214698-09-6P	221050-85-7P
313489-94-0P	313489-95-1P	313489-96-2P	313489-98-4P
313490-00-5P	313490-01-6P	313490-02-7P	313490-03-8P
313490-05-0P	313490-09-4P	313490-10-7P	313490-11-8P
313490-13-0P	313490-14-1P	313490-15-2P	313490-16-3P
313490-18-5P	313490-19-6P	313490-20-9P	313490-21-0P
313490-23-2P	313490-24-3P	313490-25-4P	313490-27-6P
313490-29-8P	313490-30-1P	313490-31-2P	313490-32-3P
313490-34-5P	313490-35-6P	313490-36-7P	313490-37-8P
313490-42-5P	313490-43-6P	313490-44-7P	313490-45-8P
313490-47-0P	313490-48-1P	313490-49-2P	313490-50-5P
313490-52-7P	313490-53-8P	313490-54-9P	313490-55-0P
313490-57-2P	313490-58-3P	313490-59-4P	313490-60-7P
313490-62-9P	313490-63-0P	313490-64-1P	313490-65-2P
313490-68-5P	313490-69-6P	313490-70-9P	313490-72-1P
313490-74-3P	313490-75-4P	313490-76-5P	313490-77-6P
313490-79-8P	313490-81-2P	313490-82-3P	313490-83-4P
313490-85-6P	313490-86-7P	313490-87-8P	313490-88-9P
313490-90-3P	313490-91-4P	313490-92-5P	313490-93-6P
313490-95-8P	313490-96-9P	313490-97-0P	313490-99-2P
313491-01-9P	313491-02-0P	313491-04-2P	313491-05-3P
313491-07-5P	313491-09-7P	313491-10-0P	313491-11-1P
313491-13-3P	313491-14-4P	313491-15-5P	313491-16-6P
313491-18-8P	313491-19-9P	313491-20-2P	313491-21-3P
313491-23-5P	313491-24-6P	313491-25-7P	313491-26-8P
313491-28-0P	313491-29-1P	313491-30-4P	313491-31-5P
313491-33-7P	313491-34-8P	313493-37-7P	

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of amino acid derivs. as serine protease inhibitors)

L28 ANSWER 16 OF 29 CAPLUS COPYRIGHT 2002 ACS

AN 2000:728390 CAPLUS

DN 134:13215

TI Nonpeptide factor **Xa** inhibitors. II. Antithrombotic evaluation in a rabbit model of electrically induced carotid artery thrombosis

AU Wong, Pancras C.; Crain, Earl J.; Knabb, Robert M.; Meade, Raymond P.; Quan, Mimi L.; Watson, Carol A.; Wexler, Ruth R.; Wright, Matthew R.; Snee, Andrew M.

CS Cardiovascular Diseases Research, DuPont Pharmaceuticals Company, Wilmington, DE, USA

SO Journal of Pharmacology and Experimental Therapeutics (2000), 295(1), 212-218

CODEN: JPETAB; ISSN: 0022-3565

PB American Society for Pharmacology and Experimental Therapeutics

DT Journal

LA English

CC 1-8 (Pharmacology)

AB SK549 (mol. wt. 546 Da) is a synthetic, selective inhibitor of human coagulation factor **Xa** (fXa) ( $K_i = 0.52 \text{ nM}$ ). This study compared the antithrombotic effects of SK549 and a series of benzamidine isoxazoline fXa inhibitors with **aspirin**, DuP 714 (a direct thrombin inhibitor), recombinant tick anticoagulant peptide, or heparin in a rabbit model of elec. induced carotid arterial thrombosis. Compds. were infused i.v. continuously from 60 min before elec. stimulation to the end of the expt. Values of ED50 (dose that increases the carotid blood flow to 50% of the control) were 0.12  $\mu\text{mol/kg/h}$  for SK549, 0.56  $\mu\text{mol/kg/h}$



for **aspirin**, 0.14 .mu.mol/kg/h for DuP 714, 0.06 .mu.mol/kg/h for recombinant tick anticoagulant peptide, and >100 U/kg/h for heparin. The EC50 (plasma concn. that increased blood flow to 50% of the control) for SK549 was 97 nM. Unlike **aspirin** and heparin, SK549 was efficacious and, at 1.5 .mu.mol/kg/h i.v. (n = 9), maintained carotid blood flow at 87.+-.6% of control level for greater than 90 min. Unlike heparin, SK549 inhibited ex vivo fXa activity but not ex vivo thrombin

activity. There was a highly significant correlation between Ki (fXa) and ED50 of a series of fXa inhibitors (r = 0.85, P <.001). Therefore, these results suggest that SK549 is a novel, potent, and effective antithrombotic agent in a rabbit model of arterial thrombosis. It is likely that SK549 exerts its antithrombotic effect through selective inhibition of fXa. Furthermore, SK549 may be clin. useful for the prevention of arterial thrombosis.

ST blood coagulation inhibitor antithrombotic artery thrombosis; SK549 antithrombotic coronary circulation artery thrombosis

IT Anticoagulants

(antithrombotic evaluation of SK549 and nonpeptide factor **Xa** inhibitors in a rabbit model of elec. induced carotid artery thrombosis)

IT Circulation

(coronary; antithrombotic evaluation of SK549 and nonpeptide factor **Xa** inhibitors in a rabbit model of elec. induced carotid artery thrombosis)

IT 193003-99-5 193004-60-3 193004-63-6 193004-64-7 193004-82-9  
193004-83-0 193004-94-3 193004-96-5 231300-13-3, SK 549

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antithrombotic evaluation of SK549 and nonpeptide factor **Xa** inhibitors in a rabbit model of elec. induced carotid artery thrombosis)

IT 9002-04-4, Thrombin 9002-05-5, Blood-coagulation factor **Xa**

RL: BPR (Biological process); BSU (Biological study, unclassified); **BIOL (Biological study)**; PROC (Process)

(antithrombotic evaluation of SK549 and nonpeptide factor **Xa** inhibitors in a rabbit model of elec. induced carotid artery thrombosis)

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

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L28 ANSWER 17 OF 29 CAPLUS COPYRIGHT 2002 ACS

AN 2000:645898 CAPLUS

DN 133:232835

TI Treatment of thrombosis by combined use of a factor **xa** inhibitor and **aspirin**, tissue plasminogen activator (TPA), a GPIIb/IIIa antagonist, low molecular weight heparin or heparin

IN Wong, Pancras C.

PA Du Pont Pharmaceuticals Company, USA

SO PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61P007-02

ICS A61P009-12; A61K031-715; A61K045-06; A61K038-49; A61K038-02;  
A61K031-42; A61K031-60; A61K038-49; A61K031-415; A61K038-02;  
A61K031-415; A61K045-06; A61K031-715; A61K031-415; A61K031-60;  
A61K031-415; A61K031-42; A61K031-415

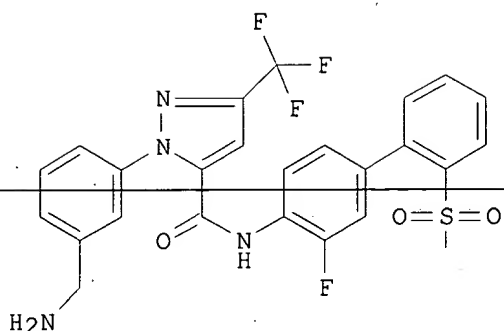
CC 1-8 (Pharmacology)

Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000053264	A1	20000914	WO 2000-US6451	20000310
	W: AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1161279	A1	20011212	EP 2000-913894	20000310
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	BR 2000010381	A	20020205	BR 2000-10381	20000310
PRAI	US 1999-123815P	P	19990311		
	WO 2000-US6451	W	20000310		

GI



- AB Provided is a method of treating thrombosis in mammals by administering therapeutically effective amts. of a combination of (i) a Factor **Xa** inhibitor, and (ii) a compd. selected from the group consisting of **aspirin**, TPA, a GPIIb/IIIa antagonist, low mol. wt. heparin and heparin, wherein the dose administered for at least one of (i) and (ii) is a subtherapeutic dose. Preferably, the combination of (i) and (ii) provides a synergistic effect. A combination of I (Factor **Xa** inhibitor) and **aspirin** at their subtherapeutic doses produced a significant antithrombotic effect in a rabbit model of arterial thrombosis. Pharmaceutical dosage forms are discussed.
- ST antithrombotic factor **Xa** inhibitor
- IT Anticoagulants  
Drug delivery systems  
(antithrombotic combination of a Factor **Xa** inhibitor and **aspirin**, TPA, a GPIIb/IIIa antagonist, or heparin deriv.)
- IT Drug interactions  
(synergistic; antithrombotic combination of a Factor **Xa** inhibitor and **aspirin**, TPA, a GPIIb/IIIa antagonist, or heparin deriv.)
- IT Integrins  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (.alpha.IIb.beta.3, antagonists; antithrombotic combination of a Factor **Xa** inhibitor and **aspirin**, TPA, a GPIIb/IIIa antagonist, or heparin deriv.)
- IT 50-78-2 9005-49-6, Heparin, biological studies 139639-23-9, Tissue plasminogen activator 185536-58-7D, salt 209955-61-3 209957-48-2 292135-59-2  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(antithrombotic combination of a Factor **Xa** inhibitor and **aspirin**, TPA, a GPIIb/IIIa antagonist, or heparin deriv.)
- IT 9002-05-5, Factor **Xa**  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors; antithrombotic combination of a Factor **Xa** inhibitor and **aspirin**, TPA, a GPIIb/IIIa antagonist, or heparin deriv.)
- RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
- RE
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(10) Squibb Bristol Myers Co; EP 0832879 A 1998 CAPLUS

L28 ANSWER 18 OF 29 CAPLUS COPYRIGHT 2002 ACS

AN 2000:573666 CAPLUS

DN 133:164010

TI Preparation of caprolactams, piperidinones, and pyrrolidinones as Factor  
Xa inhibitors in prevention or treatment of thromboses, coronary  
artery disease, or cerebrovascular disease in mammals

IN Stein, Philip D.; Bisacchi, Gregory S.; Shi, Yan; O'Connor, Stephen P.;  
Li, Chi

PA Bristol-Myers Squibb Company, USA

SO PCT Int. Appl., 284 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K031-40

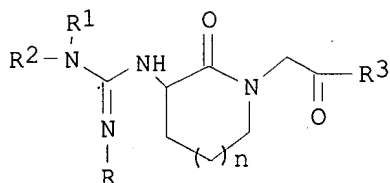
ICS A61K031-4015; A61K031-4412; A61P007-00; A61P009-00; C07D401-06;  
C07D403-06

CC 27-21 (Heterocyclic Compounds (One Hetero Atom))

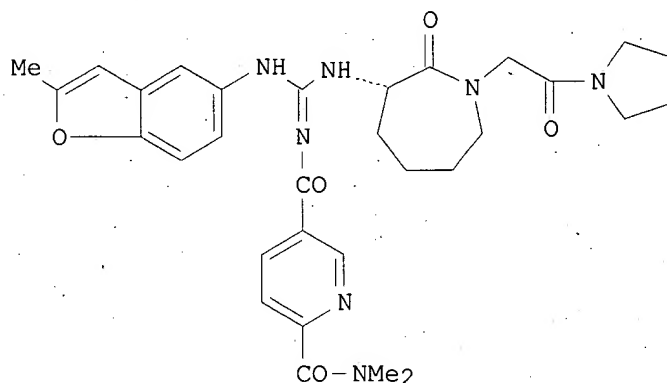
Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000047207	A1	20000817	WO 2000-US2883	20000202
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 6297233	B1	20011002	US 2000-496571	20000202
	EP 1156803	A1	20011128	EP 2000-914505	20000202
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
PRAI	US 1999-119372P	P	19990209		
	US 1999-167428P	P	19991124		
	WO 2000-US2883	W	20000202		
OS	MARPAT 133:164010				
GI					



I



II

- AB Title chiral compds. [I; R = CN, CONH<sub>2</sub>, COOCH<sub>2</sub>CH<sub>3</sub>, COC<sub>6</sub>H<sub>5</sub>, SO<sub>2</sub>NH<sub>2</sub>, OCH<sub>3</sub>, SO<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub>, SO<sub>2</sub>CH<sub>3</sub>, arylsulfonyl, heterocyclosulfonyl, (un)substituted Ph, heterocyclyl, heterocycleocarbonyl, alkoxycarbonyl, arylaminocarbonyl; R<sub>1</sub> = H, arylalkyl; R<sub>2</sub> = alkyl, (un)substituted Ph, benzoheterocyclyl, cyclopentyl; R<sub>3</sub> = heterocyclylamino, heterocyclyl, alkoxy, cycloalkylamino, OH; n = 0, 1, 2], pharmaceutically acceptable salts, and stereoisomers are pred. as Factor **Xa** inhibitors and are useful as anticoagulants (no data). A method for treating cardiovascular diseases assocd. with thromboses is also provided. Thus, the title compd. II was prepd.
- ST caprolactam Factor **Xa** inhibitor prepn anticoagulant  
cardiovascular agent; piperidinone prepn Factor **Xa** inhibitor;  
pyrrolidinone prepn Factor **Xa** inhibitor
- IT Anticoagulants  
Cardiovascular agents  
Mammal (Mammalia)  
(prepn. of caprolactams, piperidinones, and pyrrolidinones as Factor **Xa** inhibitors in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)
- IT Sulfonamides  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of caprolactams, piperidinones, and pyrrolidinones as Factor **Xa** inhibitors in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)
- IT Antihypertensives  
Thromboxane receptor antagonists  
(prepn. of pharmaceutical combination with caprolactams in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)
- IT Prostacyclin receptors  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(prepn. of pharmaceutical combination with caprolactams in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)
- IT 288075-36-5P  
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of benzocaprolactams as Factor **Xa** inhibitors in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)

IT 108-44-1, 3-Methylaniline, reactions 288083-19-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of caprolactams and piperidinones as Factor **Xa** inhibitors in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)

IT 75-64-9, tert-Butylamine, reactions 93-97-0, Benzoic anhydride 96-32-2, Methyl bromoacetate 96-50-4, 2-Aminothiazole 98-97-5, Pyrazinecarboxylic acid 107-10-8, Propylamine, reactions 109-01-3, 1-Methylpiperazine 110-70-3, N,N'-Dimethyl-ethylenediamine 122-04-3, 4-Nitrobenzoyl chloride 123-75-1, Pyrrolidine, reactions 127-06-0, Acetone oxime 138-41-0, 4-(Aminosulfonyl)benzoic acid 350-46-9, 1-Fluoro-4-nitrobenzene 369-34-6, 3,4-Difluoronitrobenzene 461-82-5, 4-(Trifluoromethoxy)aniline 462-08-8, 3-Pyridinamine 501-53-1, Benzyl chloroformate 504-29-0, 2-Aminopyridine 586-38-9, 3-Methoxybenzoic acid 614-69-7, (2-Methyl)phenyl isothiocyanate 621-30-7, (3-Methylphenyl)isothiocyanate 622-08-2, 2-Benzyloxyethanol 624-83-9, Methyl isocyanate 667-24-3 694-05-3, 1,2,3,6-Tetrahydropyridine 881-86-7, Dimethyl 2,5-pyridinedicarboxylate 937-14-4, 3-Chloroperbenzoic acid 1636-33-5, 2-Naphthylisothiocyanate 2243-83-6, 2-Naphthoyl chloride 2439-77-2, 2-Methoxybenzamide 2466-76-4, N-Acetylimidazole 2759-28-6, 1-Benzylpiperazine 3010-82-0, 1,4-Benzenedicarboxamide 3662-78-0, Methyl 4-isothiocyanatobenzoate 4039-32-1, Lithium bis(trimethylsilyl)amide 5437-45-6, Benzyl bromoacetate 5638-76-6 13078-79-0, 3-Chlorobenzeneethanamine 13382-43-9, 2-Methyl-5-benzothiazolamine 16182-04-0, Ethoxycarbonyl isothiocyanate 19981-17-0, Sodium cyanamide 21568-87-6 22118-09-8, Bromoacetyl chloride 23968-37-8, 2-Methyl-5-benzofuranamine hydrochloride 25660-70-2 26210-75-3, 2-Methyl-5-benzofuranamine 28675-14-1, N,N'-Dimethylbenzenediamine 32955-21-8, Ethyl 2-amino-5-thiazolecarboxylate 36397-23-6, 4-Methoxy-benzenepropanamine 37718-11-9, 4-Pyrazolecarboxylic acid 40033-49-6 66090-36-6, 3-Chlorobenzoyl isothiocyanate 69941-33-9, Benzenedicarboxamide 70654-85-2 72745-76-7, 2-Methyl-5-benzoxazolamine 76944-95-1 79463-77-7, Diphenyl cyanocarbonimide 79839-29-5 82846-28-4 83527-99-5, 2-Amino-6H-dibenzo[b,d]pyran-6-one 84358-13-4, 1,4-Piperidinedicarboxylic acid 1-(1,1-dimethylethyl) ester 87977-31-9, 2-Methyl-6-nitrobenzofuran 90892-09-4, 1-(Bromoacetyl)pyrrolidine 106691-72-9 126417-82-1, 1-Methyl-3-(4-chlorophenyl)pyrazol-5-amine 152839-22-0 159465-27-7 162468-78-2 190141-99-2, tert-Butyl 3-amino-4-hydroxy-1-pyrrolidinecarboxylate 288082-90-6 288083-15-8 288083-16-9 288083-24-9 288083-36-3 288083-80-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of caprolactams as Factor **Xa** inhibitors in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)

IT 13680-03-0P, 2-Propanone O-(4-nitrophenyl)oxime 14146-09-9P, 2-Methyl-5-nitrobenzofuran 28439-70-5P 60557-54-2P 93961-04-7P 103478-12-2P 130228-96-5P 173371-37-4P 288074-84-0P 288082-91-7P 288083-17-0P 288083-18-1P 288083-20-5P 288083-21-6P 288083-22-7P 288083-23-8P, 2-Methyl-6-aminobenzofuran 288083-25-0P 288083-26-1P 288083-27-2P 288083-28-3P, 4-Fluoro-2-methyl-5-nitrobenzofuran 288083-29-4P, 6-Fluoro-2-methyl-5-nitrobenzofuran 288083-30-7P, 4-Fluoro-2-methyl-7-nitrobenzofuran 288083-31-8P, 4-Fluoro-2-methyl-5-aminobenzofuran 288083-32-9P 288083-33-0P 288083-34-1P 288083-35-2P 288083-37-4P 288083-38-5P 288083-39-6P 288083-40-9P 288083-41-0P 288083-42-1P 288083-43-2P 288083-44-3P 288083-45-4P 288083-47-6P, 2-Methyl-3-nitro-5-benzofuranamine 288083-48-7P 288083-49-8P 288083-50-1P 288083-51-2P 288083-52-3P 288083-53-4P 288083-54-5P 288083-56-7P 288083-57-8P 288083-58-9P 288083-59-0P 288083-60-3P 288083-61-4P 288083-62-5P 288083-63-6P 288083-65-8P

288083-66-9P 288083-67-0P 288083-69-2P 288083-71-6P 288083-72-7P  
 288083-73-8P 288083-75-0P 288083-76-1P 288083-77-2P 288083-78-3P  
 288083-79-4P 288083-81-8P 288083-82-9P 288083-83-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(prepn. of caprolactams as Factor **Xa** inhibitors in prevention  
 or treatment of thromboses, coronary artery disease, or cerebrovascular  
 disease in mammals)

IT	288074-98-6P	288075-54-7P	288077-92-9P	288078-14-8P	288078-41-1P
	288078-58-0P	288078-66-0P	288079-24-3P	288079-60-7P	288079-76-5P
	288079-91-4P	288080-49-9P	288082-58-6P	288082-62-2P	288083-95-4P
	288084-12-8P	288084-20-8P			

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);  
 BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);  
 USES (Uses)

(prepn. of caprolactams as Factor **Xa** inhibitors in prevention  
 or treatment of thromboses, coronary artery disease, or cerebrovascular  
 disease in mammals)

IT	288074-71-5P	288074-72-6P	288074-73-7P	288074-74-8P	288074-75-9P
	288074-76-0P	288074-77-1P	288074-78-2P	288074-79-3P	288074-80-6P
	288074-81-7P	288074-82-8P	288074-85-1P	288074-86-2P	288074-87-3P
	288074-88-4P	288074-97-5P	288074-99-7P	288075-00-3P	288075-01-4P
	288075-02-5P	288075-03-6P	288075-04-7P	288075-05-8P	288075-06-9P
	288075-07-0P	288075-08-1P	288075-09-2P	288075-10-5P	288075-11-6P
	288075-12-7P	288075-13-8P	288075-14-9P	288075-15-0P	288075-16-1P
	288075-17-2P	288075-18-3P	288075-19-4P	288075-20-7P	288075-21-8P
	288075-22-9P	288075-23-0P	288075-24-1P	288075-25-2P	288075-26-3P
	288075-27-4P	288075-28-5P	288075-29-6P	288075-30-9P	288075-31-0P
	288075-37-6P	288075-38-7P	288075-39-8P	288075-40-1P	288075-41-2P
	288075-42-3P	288075-43-4P	288075-44-5P	288075-45-6P	288075-46-7P
	288075-47-8P	288075-48-9P	288075-49-0P	288075-50-3P	288075-51-4P
	288075-52-5P	288075-53-6P	288075-55-8P	288075-56-9P	288075-57-0P
	288075-58-1P	288075-59-2P	288075-60-5P	288075-61-6P	288075-62-7P
	288075-63-8P	288075-64-9P	288075-65-0P	288075-66-1P	288075-67-2P
	288075-68-3P	288075-69-4P	288075-70-7P	288075-71-8P	288075-72-9P
	288075-73-0P	288075-74-1P	288075-75-2P	288075-76-3P	288075-77-4P
	288075-78-5P	288075-79-6P	288075-80-9P	288075-81-0P	288075-82-1P
	288075-83-2P	288075-84-3P	288075-85-4P	288075-86-5P	288075-87-6P
	288075-88-7P	288075-89-8P	288075-90-1P	288075-91-2P	288075-92-3P
	288075-93-4P	288075-94-5P	288075-95-6P	288075-96-7P	288075-97-8P
	288075-98-9P	288075-99-0P	288076-00-6P	288076-01-7P	288076-02-8P
	288076-03-9P	288076-04-0P	288076-05-1P	288076-06-2P	288076-07-3P
	288076-08-4P	288076-09-5P	288076-10-8P	288076-11-9P	288076-12-0P
	288076-13-1P	288076-14-2P	288076-15-3P	288076-16-4P	288076-17-5P
	288076-18-6P	288076-19-7P	288076-20-0P	288076-21-1P	288076-22-2P
	288076-23-3P	288076-24-4P	288076-25-5P	288076-26-6P	288076-27-7P
	288076-28-8P	288076-29-9P	288076-30-2P	288076-31-3P	288076-32-4P
	288076-33-5P	288076-34-6P	288076-35-7P	288076-36-8P	288076-37-9P
	288076-38-0P	288076-39-1P	288076-40-4P	288076-41-5P	288076-42-6P
	288076-43-7P	288076-44-8P	288076-45-9P	288076-46-0P	288076-47-1P
	288076-48-2P	288076-49-3P	288076-50-6P	288076-51-7P	288076-52-8P
	288076-53-9P	288076-54-0P	288076-55-1P	288076-56-2P	288076-57-3P
	288076-58-4P	288076-59-5P	288076-60-8P	288076-61-9P	288076-62-0P
	288076-63-1P	288076-64-2P	288076-65-3P	288076-66-4P	288076-67-5P
	288076-68-6P	288076-69-7P	288076-70-0P	288076-71-1P	288076-72-2P
	288076-73-3P	288076-74-4P	288076-75-5P	288076-76-6P	288076-77-7P
	288076-78-8P	288076-79-9P	288076-80-2P	288076-81-3P	288076-82-4P
	288076-83-5P	288076-84-6P	288076-85-7P	288076-86-8P	288076-87-9P
	288076-88-0P	288076-89-1P	288076-90-4P	288076-91-5P	288076-92-6P
	288076-93-7P	288076-94-8P	288076-95-9P	288076-96-0P	288076-97-1P
	288076-98-2P	288076-99-3P	288077-00-9P	288077-01-0P	288077-02-1P
	288077-03-2P	288077-04-3P	288077-05-4P	288077-06-5P	288077-07-6P
	288077-08-7P	288077-09-8P	288077-10-1P	288077-11-2P	288077-12-3P

288077-13-4P	288077-14-5P	288077-15-6P	288077-16-7P	288077-17-8P
288077-18-9P	288077-19-0P	288077-20-3P	288077-21-4P	288077-22-5P
288077-23-6P				

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of caprolactams as Factor Xa inhibitors in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)

IT	288077-24-7P	288077-25-8P	288077-26-9P	288077-27-0P	288077-28-1P
	288077-29-2P	288077-30-5P	288077-31-6P	288077-32-7P	288077-33-8P
	288077-34-9P	288077-35-0P	288077-36-1P	288077-37-2P	288077-38-3P
	288077-39-4P	288077-40-7P	288077-41-8P	288077-42-9P	288077-43-0P
	288077-44-1P	288077-45-2P	288077-46-3P	288077-47-4P	288077-48-5P
	288077-49-6P	288077-50-9P	288077-51-0P	288077-52-1P	288077-53-2P
	288077-54-3P	288077-55-4P	288077-56-5P	288077-57-6P	288077-58-7P
	288077-59-8P	288077-60-1P	288077-61-2P	288077-62-3P	288077-63-4P
	288077-64-5P	288077-65-6P	288077-66-7P	288077-67-8P	288077-68-9P
	288077-69-0P	288077-70-3P	288077-71-4P	288077-72-5P	288077-73-6P
	288077-74-7P	288077-75-8P	288077-76-9P	288077-77-0P	288077-78-1P
	288077-79-2P	288077-80-5P	288077-81-6P	288077-82-7P	288077-83-8P
	288077-84-9P	288077-85-0P	288077-86-1P	288077-87-2P	288077-88-3P
	288077-89-4P	288077-90-7P	288077-91-8P	288077-93-0P	288077-94-1P
	288077-95-2P	288077-96-3P	288077-97-4P	288077-98-5P	288077-99-6P
	288078-00-2P	288078-01-3P	288078-02-4P	288078-03-5P	288078-04-6P
	288078-05-7P	288078-06-8P	288078-07-9P	288078-08-0P	288078-09-1P
	288078-10-4P	288078-11-5P	288078-12-6P	288078-13-7P	288078-15-9P
	288078-16-0P	288078-17-1P	288078-18-2P	288078-19-3P	288078-20-6P
	288078-21-7P	288078-22-8P	288078-23-9P	288078-24-0P	288078-25-1P
	288078-26-2P	288078-27-3P	288078-28-4P	288078-29-5P	288078-30-8P
	288078-31-9P	288078-32-0P	288078-33-1P	288078-34-2P	288078-35-3P
	288078-36-4P	288078-37-5P	288078-38-6P	288078-39-7P	288078-40-0P
	288078-42-2P	288078-43-3P	288078-44-4P	288078-45-5P	288078-46-6P
	288078-47-7P	288078-48-8P	288078-49-9P	288078-50-2P	288078-51-3P
	288078-52-4P	288078-53-5P	288078-54-6P	288078-55-7P	288078-56-8P
	288078-57-9P	288078-59-1P	288078-60-4P	288078-61-5P	288078-62-6P
	288078-63-7P	288078-64-8P	288078-65-9P	288078-67-1P	288078-68-2P
	288078-69-3P	288078-70-6P	288078-71-7P	288078-72-8P	288078-73-9P
	288078-74-0P	288078-75-1P	288078-76-2P	288078-77-3P	288078-78-4P
	288078-79-5P	288078-81-9P	288078-83-1P	288078-85-3P	288078-87-5P
	288078-89-7P	288078-91-1P	288078-93-3P	288078-95-5P	288078-97-7P
	288078-99-9P	288079-01-6P	288079-03-8P	288079-05-0P	288079-07-2P
	288079-09-4P	288079-11-8P	288079-13-0P	288079-15-2P	288079-18-5P
	288079-20-9P	288079-22-1P	288079-26-5P	288079-28-7P	288079-29-8P
	288079-30-1P	288079-31-2P	288079-32-3P	288079-34-5P	288079-35-6P
	288079-37-8P	288079-38-9P	288079-39-0P	288079-40-3P	288079-41-4P
	288079-42-5P	288079-43-6P	288079-44-7P	288079-45-8P	288079-46-9P
	288079-47-0P	288079-48-1P	288079-49-2P	288079-50-5P	288079-51-6P
	288079-52-7P	288079-53-8P	288079-54-9P	288079-55-0P	288079-56-1P
	288079-57-2P	288079-58-3P	288079-61-8P	288079-62-9P	288079-63-0P
	288079-64-1P	288079-65-2P	288079-66-3P	288079-67-4P	288079-68-5P
	288079-69-6P	288079-70-9P	288079-71-0P	288079-72-1P	288079-73-2P
	288079-74-3P	288079-75-4P	288079-77-6P	288079-78-7P	288079-79-8P
	288079-80-1P	288079-81-2P	288079-82-3P	288079-83-4P	288079-84-5P
	288079-85-6P	288079-86-7P	288079-87-8P	288079-88-9P	288079-89-0P
	288079-90-3P	288079-92-5P	288079-93-6P	288079-94-7P	288079-95-8P
	288079-96-9P				

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of caprolactams as Factor Xa inhibitors in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)

IT	288079-97-0P	288079-98-1P	288079-99-2P	288080-00-2P	288080-01-3P
	288080-02-4P	288080-03-5P	288080-04-6P	288080-05-7P	288080-06-8P



288080-07-9P	288080-08-0P	288080-09-1P	288080-10-4P	288080-11-5P
288080-12-6P	288080-13-7P	288080-14-8P	288080-15-9P	288080-16-0P
288080-17-1P	288080-18-2P	288080-20-6P	288080-21-7P	288080-22-8P
288080-23-9P	288080-24-0P	288080-25-1P	288080-26-2P	288080-27-3P
288080-28-4P	288080-30-8P	288080-31-9P	288080-32-0P	288080-33-1P
288080-34-2P	288080-35-3P	288080-36-4P	288080-37-5P	288080-38-6P
288080-39-7P	288080-40-0P	288080-41-1P	288080-42-2P	288080-43-3P
288080-44-4P	288080-45-5P	288080-46-6P	288080-47-7P	288080-50-2P
288080-51-3P	288080-52-4P	288080-53-5P	288080-54-6P	288080-55-7P
288080-56-8P	288080-57-9P	288080-58-0P	288080-59-1P	288080-60-4P
288080-61-5P	288080-62-6P	288080-63-7P	288080-64-8P	288080-65-9P
288080-66-0P	288080-67-1P	288080-68-2P	288080-69-3P	288080-70-6P
288080-71-7P	288080-72-8P	288080-73-9P	288080-74-0P	288080-75-1P
288080-76-2P	288080-77-3P	288080-78-4P	288080-79-5P	288080-80-8P
288080-81-9P	288080-82-0P	288080-83-1P	288080-84-2P	288080-85-3P
288080-86-4P	288080-87-5P	288080-88-6P	288080-89-7P	288080-90-0P
288080-91-1P	288080-92-2P	288080-93-3P	288080-94-4P	288080-95-5P
288080-96-6P	288080-97-7P	288080-98-8P	288080-99-9P	288081-00-5P
288081-01-6P	288081-02-7P	288081-03-8P	288081-04-9P	288081-05-0P
288081-06-1P	288081-07-2P	288081-08-3P	288081-09-4P	288081-10-7P
288081-11-8P	288081-12-9P	288081-13-0P	288081-14-1P	288081-15-2P
288081-16-3P	288081-17-4P	288081-18-5P	288081-19-6P	288081-20-9P
288081-21-0P	288081-22-1P	288081-23-2P	288081-24-3P	288081-25-4P
288081-26-5P	288081-27-6P	288081-28-7P	288081-29-8P	288081-30-1P
288081-31-2P	288081-32-3P	288081-33-4P	288081-34-5P	288081-35-6P
288081-36-7P	288081-37-8P	288081-38-9P	288081-39-0P	288081-40-3P
288081-41-4P	288081-42-5P	288081-43-6P	288081-44-7P	288081-45-8P
288081-46-9P	288081-47-0P	288081-48-1P	288081-49-2P	288081-50-5P
288081-51-6P	288081-52-7P	288081-53-8P	288081-54-9P	288081-55-0P
288081-56-1P	288081-57-2P	288081-58-3P	288081-59-4P	288081-60-7P
288081-61-8P	288081-62-9P	288081-63-0P	288081-64-1P	288081-65-2P
288081-66-3P	288081-67-4P	288081-68-5P	288081-69-6P	288081-70-9P
288081-71-0P	288081-72-1P	288081-73-2P	288081-74-3P	288081-75-4P
288081-76-5P	288081-77-6P	288081-78-7P	288081-79-8P	288081-80-1P
288081-81-2P	288081-82-3P	288081-83-4P	288081-84-5P	288081-85-6P
288081-86-7P	288081-87-8P	288081-88-9P	288081-89-0P	288081-90-3P
288081-91-4P	288081-92-5P	288081-93-6P	288081-94-7P	288081-95-8P
288081-96-9P	288081-97-0P	288081-98-1P	288081-99-2P	288082-00-8P
288082-01-9P	288082-02-0P	288082-03-1P	288082-04-2P	288082-05-3P
288082-06-4P	288082-07-5P	288082-08-6P	288082-09-7P	288082-10-0P
288082-11-1P	288082-12-2P	288082-13-3P	288082-14-4P	288082-15-5P
288082-16-6P	288082-17-7P	288082-18-8P	288082-19-9P	288082-20-2P
288082-21-3P	288082-22-4P	288082-23-5P	288082-24-6P	288082-25-7P
288082-26-8P	288082-27-9P	288082-28-0P	288082-29-1P	288082-30-4P
288082-31-5P	288082-32-6P	288082-33-7P	288082-34-8P	288082-35-9P
288082-36-0P				

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of caprolactams as Factor **Xa** inhibitors in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)

IT	288082-37-1P	288082-38-2P	288082-39-3P	288082-40-6P	288082-41-7P
	288082-42-8P	288082-43-9P	288082-44-0P	288082-45-1P	288082-46-2P
	288082-47-3P	288082-48-4P	288082-49-5P	288082-50-8P	288082-51-9P
	288082-52-0P	288082-53-1P	288082-54-2P	288082-55-3P	288082-56-4P
	288082-57-5P	288082-59-7P	288082-60-0P	288082-61-1P	288082-63-3P
	288082-64-4P	288082-65-5P	288082-66-6P	288082-67-7P	288082-68-8P
	288082-69-9P	288082-70-2P	288082-71-3P	288082-72-4P	288082-73-5P
	288082-74-6P	288082-75-7P	288082-76-8P	288082-77-9P	288082-78-0P
	288082-79-1P	288082-80-4P	288082-81-5P	288082-82-6P	288082-83-7P
	288082-84-8P	288082-85-9P	288082-86-0P	288082-87-1P	288082-88-2P
	288082-89-3P	288082-92-8P	288082-93-9P	288082-94-0P	288082-95-1P
	288082-96-2P	288082-97-3P	288082-98-4P	288082-99-5P	288083-00-1P

288083-01-2P	288083-02-3P	288083-03-4P	288083-04-5P	288083-05-6P
288083-06-7P	288083-07-8P	288083-08-9P	288083-09-0P	288083-10-3P
288083-11-4P	288083-12-5P	288083-13-6P	288083-14-7P	288083-84-1P
288083-85-2P	288083-86-3P	288083-87-4P	288083-88-5P	288083-89-6P
288083-90-9P	288083-91-0P	288083-92-1P	288083-93-2P	288083-94-3P
288083-96-5P	288083-97-6P	288083-98-7P	288083-99-8P	288084-00-4P
288084-01-5P	288084-02-6P	288084-03-7P	288084-04-8P	288084-05-9P

288084-06-0P	288084-07-1P	288084-08-2P	288084-09-3P	288084-10-6P
288084-11-7P	288084-13-9P	288084-14-0P	288084-15-1P	288084-16-2P
288084-17-3P	288084-18-4P	288084-19-5P	288084-21-9P	288084-22-0P
288084-23-1P	288084-24-2P	288084-25-3P	288084-26-4P	288084-27-5P
288084-28-6P	288084-29-7P	288084-30-0P	288084-31-1P	288084-32-2P
288084-33-3P	288084-34-4P	288084-35-5P	288084-36-6P	288093-54-9P
288093-55-0P	288093-56-1P	288149-15-5P	288149-16-6P	

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of caprolactams as Factor **Xa** inhibitors in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)

IT 9002-05-5, Factor **Xa**

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(prepn. of caprolactams, piperidinones, and pyrrolidinones as Factor **Xa** inhibitors in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)

IT 50-78-2 58-32-2, Dipyridamole 81-81-2, Warfarin 9002-01-1, Streptokinase 9003-53-6, ASPAC 9039-53-6, Urokinase 32828-81-2, Picotamide 55142-85-3, Ticlopidine 73963-72-1, Cilostazol 74050-98-9, Ketanserine 82657-92-9, Prourokinase 105857-23-6, Activase 105913-11-9D, Plasminogen activator, animal salivary gland 113665-84-2, Clopidogrel 143443-90-7, Ifetroban 152815-51-5 156867-02-6 171870-23-8, Lanoteplase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(prepn. of pharmaceutical combination with caprolactams in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)

IT 92235-39-7, 1,1-Dimethylethyl ((S)-oxo-3-piperidinyl)carbamate

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of piperidinones as Factor **Xa** inhibitors in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)

IT 288074-89-5P 288074-90-8P 288074-91-9P 288074-92-0P 288075-32-1P 288075-33-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of piperidinones as Factor **Xa** inhibitors in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)

IT 92235-34-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of pyrrolidinones as Factor **Xa** inhibitors in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)

IT 288074-93-1P 288074-94-2P 288074-95-3P 288074-96-4P 288075-34-3P 288075-35-4P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of pyrrolidinones as Factor **Xa** inhibitors in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Lowe; US 5484917 A 1996 CAPLUS  
(2) Lowe; US 5618811 A 1997 CAPLUS

L28 ANSWER 19 OF 29 CAPLUS COPYRIGHT 2002 ACS

AN 2000:457059 CAPLUS

DN 133:89437

TI Preparation of heteroaryl-substituted aromatic amides as factor **Xa**  
inhibitors

IN Beight, Douglas Wade; Craft, Trelia Joyce; Denny, Carl Penman;  
Franciskovich, Jeffry Bernard; Goodson, Theodore, Jr.; Hall, Steven  
Edward; Herron, David Kent; Joseph, Sajan Pariyadan; Klimkowski, Valentine  
Joseph; Masters, John Joseph; Mendel, David; Milot, Guy; Pineiro-Nunez,  
Marta Maria; Sawyer, Jason Scott; Shuman, Robert Theodore; Smith, Gerald  
Floyd; Tebbe, Anne Louise; Tinsley, Jennifer Marie; Weir, Leonard Crayton;  
Wikel, James Howard; Wiley, Michael Robert; Yee, Ying Kwong  
PA Eli Lilly and Co., USA; Kyle, Jeffrey, Alan; et al.

SO PCT Int. Appl., 403 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C07D401-14

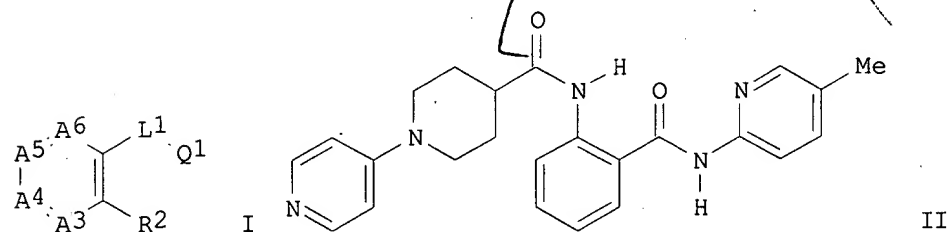
ICS C07D401-12; C07D417-14; C07D409-14; C07D405-14; C07D213-74;  
A61K031-395; A61K031-435; A61K031-495; A61P007-02; C07D401-14;  
C07D213-00; C07D213-00; C07D211-00

CC 27-16 (Heterocyclic Compounds (One Hetero Atom))

Section cross-reference(s): 1, 28, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000039118	A1	20000706	WO 1999-US29946	19991215
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	EP 1140903	A1	20011010	EP 1999-964279	19991215
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
PRAI	US 1998-113556P	P	19981223		
	WO 1999-US29946	W	19991215		
OS	MARPAT 133:89437				
GI					



AB The title compds. [I; A3-A6, together with the two carbons to which they are attached, complete a substituted benzene in which A3 = CR3, A4 = CR4,

A5 = CR5, and A6 = CR6 (wherein R3 = H, Me, MeO, etc.; one of R4 and R5 = H, alkyl, halo, etc.; the other of R4 and R5 = H; R6 = H, Me, F, etc.); L1 = CONH; Q1 = 2-pyridinyl (un)substituted at the 5-position, 3-pyridinyl (un)substituted at the 6-position, 2-pyrimidinyl (un)substituted at the 5-position, etc.; R2 = L2Q2 (L2 = NHCO, NHCH2, OCH2, etc.; Q2 = (un)substituted piperidinyl, piperazinyl, Ph, etc.)) and their pharmaceutically acceptable salts, useful as inhibitors of factor

**Xa** (no data), were prepd. and formulated. E.g., a multi-step synthesis of II.HCl was given. In general, compds. I are effective at 0.01-1000 mg/kg/day.

ST arom amide heteroaryl prepn formulation factor **Xa** inhibitor anticoagulant

IT Anticoagulants

(prepn. of heteroaryl-substituted arom. amides as factor **Xa** inhibitors)

IT	280769-11-1P	280769-16-6P	280769-22-4P	280769-23-5P	280769-24-6P
	280769-46-2P	280769-59-7P	280769-68-8P	280769-83-7P	280770-51-6P
	280770-52-7P	280770-59-4P	280770-66-3P	280770-79-8P	280770-91-4P
	280770-93-6P	280770-95-8P	280771-19-9P	280771-47-3P	280771-49-5P
	280771-53-1P	280771-55-3P			

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of heteroaryl-substituted arom. amides as factor **Xa** inhibitors)

IT	280768-65-2P	280768-66-3P	280768-67-4P	280768-68-5P	280768-69-6P
	280768-70-9P	280768-71-0P	280768-72-1P	280768-73-2P	280768-74-3P
	280768-75-4P	280768-76-5P	280768-77-6P	280768-78-7P	280768-79-8P
	280768-80-1P	280768-81-2P	280768-82-3P	280768-83-4P	280768-84-5P
	280768-85-6P	280768-86-7P	280768-87-8P	280768-88-9P	280768-89-0P
	280768-90-3P	280768-91-4P	280768-92-5P	280768-93-6P	280768-94-7P
	280768-95-8P	280768-96-9P	280768-97-0P	280768-98-1P	280768-99-2P
	280769-00-8P	280769-01-9P	280769-02-0P	280769-03-1P	280769-04-2P
	280769-05-3P	280769-06-4P	280769-07-5P	280769-08-6P	280769-09-7P
	280769-10-0P	280769-12-2P	280769-13-3P	280769-14-4P	280769-15-5P
	280769-17-7P	280769-18-8P	280769-19-9P	280769-20-2P	280769-21-3P
	280769-25-7P	280769-26-8P	280769-27-9P	280769-28-0P	280769-30-4P
	280769-33-7P	280769-36-0P	280769-39-3P	280769-40-6P	280769-41-7P
	280769-42-8P	280769-43-9P	280769-44-0P	280769-45-1P	280769-47-3P
	280769-48-4P	280769-49-5P	280769-50-8P	280769-51-9P	280769-52-0P
	280769-53-1P	280769-54-2P	280769-55-3P	280769-56-4P	280769-57-5P
	280769-58-6P	280769-60-0P	280769-61-1P	280769-62-2P	280769-63-3P
	280769-64-4P	280769-65-5P	280769-66-6P	280769-67-7P	280769-69-9P
	280769-70-2P	280769-71-3P	280769-72-4P	280769-73-5P	280769-74-6P
	280769-75-7P	280769-76-8P	280769-77-9P	280769-78-0P	280769-79-1P
	280769-80-4P	280769-81-5P	280769-82-6P	280769-84-8P	280769-85-9P
	280769-86-0P	280769-89-3P	280769-91-7P	280769-92-8P	280769-93-9P
	280769-94-0P	280769-95-1P	280769-96-2P	280769-97-3P	280769-98-4P
	280769-99-5P	280770-00-5P	280770-01-6P	280770-02-7P	280770-03-8P
	280770-04-9P	280770-05-0P	280770-06-1P	280770-07-2P	280770-08-3P
	280770-09-4P	280770-10-7P	280770-11-8P	280770-12-9P	280770-13-0P
	280770-14-1P	280770-15-2P	280770-16-3P	280770-17-4P	280770-18-5P
	280770-19-6P	280770-20-9P	280770-21-0P	280770-22-1P	280770-23-2P
	280770-24-3P	280770-25-4P	280770-26-5P	280770-27-6P	280770-28-7P
	280770-29-8P	280770-30-1P	280770-31-2P	280770-32-3P	280770-33-4P
	280770-34-5P	280770-35-6P	280770-36-7P	280770-37-8P	280770-38-9P
	280770-39-0P	280770-40-3P	280770-41-4P	280770-42-5P	280770-43-6P
	280770-44-7P	280770-45-8P	280770-46-9P	280770-47-0P	280770-48-1P
	280770-49-2P	280770-50-5P	280770-53-8P	280770-54-9P	280770-55-0P
	280770-56-1P	280770-58-3P	280770-60-7P	280770-61-8P	280770-62-9P
	280770-63-0P	280770-64-1P	280770-65-2P	280770-67-4P	280770-68-5P
	280770-69-6P	280770-70-9P	280770-71-0P	280770-72-1P	280770-73-2P

280770-74-3P	280770-75-4P	280770-76-5P	280770-77-6P	280770-78-7P
280770-80-1P	280770-81-2P	280770-82-3P	280770-83-4P	280770-84-5P
280770-85-6P	280770-86-7P	280770-87-8P	280770-88-9P	280770-89-0P
280770-90-3P	280770-92-5P	280770-94-7P	280770-96-9P	280770-97-0P
280770-98-1P	280770-99-2P	280771-00-8P	280771-01-9P	280771-02-0P
280771-03-1P	280771-04-2P	280771-05-3P	280771-06-4P	280771-07-5P
280771-08-6P	280771-09-7P	280771-10-0P	280771-11-1P	280771-12-2P

280771-13-3P	280771-14-4P	280771-15-5P	280771-16-6P	280771-17-7P
280771-18-8P	280771-20-2P	280771-21-3P	280771-22-4P	280771-23-5P
280771-24-6P	280771-25-7P	280771-26-8P	280771-27-9P	

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heteroaryl-substituted arom. amides as factor **Xa** inhibitors)

IT	280771-28-0P	280771-29-1P	280771-30-4P	280771-31-5P	280771-32-6P
	280771-33-7P	280771-34-8P	280771-35-9P	280771-36-0P	280771-37-1P
	280771-38-2P	280771-39-3P	280771-40-6P	280771-41-7P	280771-42-8P
	280771-43-9P	280771-44-0P	280771-45-1P	280771-46-2P	280771-48-4P
	280771-50-8P	280771-51-9P	280771-52-0P	280771-54-2P	280771-56-4P
	280771-57-5P				

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heteroaryl-substituted arom. amides as factor **Xa** inhibitors)

IT. **9002-05-5, Factor Xa**

RL: BSU (Biological study, unclassified); MSC (Miscellaneous); **BIOL (Biological study)**

(prepn. of heteroaryl-substituted arom. amides as factor **Xa** inhibitors)

IT 67-64-1, Acetone, reactions 75-64-9, tert-Butylamine, reactions  
 78-84-2, Isobutyraldehyde 78-93-3, Methyl ethyl ketone, reactions  
 89-98-5, 2-Chlorobenzaldehyde 96-22-0, 3-Pentanone 96-33-3 97-96-1,  
 2-Ethylbutyraldehyde 98-01-1, Furan-2-carboxaldehyde, reactions  
 98-74-8, 4-Nitrobenzenesulfonyl chloride 98-80-6, Phenylboronic acid  
 99-88-7, 4-Isopropylaniline 99-92-3 100-52-7, Benzaldehyde, reactions  
 104-88-1, 4-Chlorobenzaldehyde, reactions 105-36-2, Ethyl bromoacetate  
 105-58-8, Diethyl carbonate 106-47-8, 4-Chloroaniline, reactions  
 107-13-1, 2-Propenenitrile, reactions 108-94-1, Cyclohexanone, reactions  
 110-52-1, 1,4-Dibromobutane 111-42-2, reactions 120-92-3,  
 Cyclopentanone 122-85-0, 4-Acetamidobenzaldehyde 123-11-5,  
 4-Methoxybenzaldehyde, reactions 123-19-3, 4-Heptanone 123-38-6,  
 Propionaldehyde, reactions 123-75-1, Pyrrolidine, reactions 134-20-3  
 141-75-3, Butyryl chloride 177-11-7, 1,4-Dioxo-8-azaspiro[4.5]decane  
 320-98-9, 5-Fluoro-2-nitrobenzoic acid 446-10-6, 4-Fluoro-2-nitrotoluene  
 500-22-1, Pyridine-3-carboxaldehyde 502-42-1, Cycloheptanone 503-29-7,  
 Azetidine 583-60-8, 2-Methylcyclohexanone 583-68-6,  
 2-Bromo-4-methylaniline 585-71-7, (1-Bromoethyl)benzene 587-04-2,  
 3-Chlorobenzaldehyde 589-16-2, 4-Ethylaniline 610-14-0, 2-Nitrobenzoyl  
 chloride 620-23-5 701-57-5, Methyl 4-nitrophenyl sulfide 765-43-5,  
 Cyclopropylmethylketone 769-10-8, 2-Fluoro-6-nitrotoluene 872-85-5,  
 4-Pyridinecarboxaldehyde 873-38-1, 2-Bromo-4-chloroaniline 1003-04-9,  
 Tetrahydrothiophen-3-one 1003-98-1, 2-Bromo-4-fluoroaniline 1008-91-9,  
 1-(4-Pyridyl)piperazine 1072-72-6, Tetrahydrothiopyran-4-one  
 1072-98-6, 2-Amino-5-chloropyridine 1120-72-5, 2-Methylcyclopentanone  
 1121-60-4, Pyridine-2-carboxaldehyde 1122-54-9, 4-Acetylpyridine  
 1126-09-6, Ethyl isonipecotate 1489-69-6, Cyclopropanecarboxaldehyde  
 1603-41-4, 2-Amino-5-methylpyridine 1710-98-1, 4-tert-Butylbenzoyl  
 chloride 1776-53-0, 4-Aminocyclohexanecarboxylic acid 1793-07-3,  
 2-Carbomethoxyphenyl isocyanate 1882-69-5, 5-Methoxy-2-nitrobenzoic acid  
 2148-56-3, 2-Amino-6-chlorobenzoic acid 2366-70-3, 4,4,4-Trifluorobutan-  
 2-one 2516-95-2, 5-Chloro-2-nitrobenzoic acid 3113-72-2,

5-Methyl-2-nitrobenzoic acid 3678-63-5, 4-Chloro-2-picoline 4315-09-7,  
 4-Nitroisophthalic acid 4363-93-3, Quinoline-4-carboxaldehyde  
 4771-47-5, 3-Chloro-2-nitrobenzoic acid 4786-20-3, 2-Butenenitrile  
 4897-84-1, Methyl 4-bromobutyrate 4920-80-3, 3-Methoxy-2-nitrobenzoic  
 acid 5350-93-6 5372-81-6, 2-Aminoterephthalic acid dimethyl ester  
 5428-89-7, 2-Amino-5-chloropyrimidine 5437-38-7, 3-Methyl-2-nitrobenzoic  
 acid 5469-69-2, 3-Amino-6-chloropyridazine 5470-22-4,

4-Chloropicolinic acid 5538-51-2, **Acetylsalicylic acid**  
 chloride 6280-88-2, 4-Chloro-2-nitrobenzoic acid 7304-32-7,  
 2-Fluoro-5-nitrobenzoic acid 7379-35-3, 4-Chloropyridine hydrochloride  
 7486-35-3, Tributyl(vinyl)tin 10177-29-4, 4-Chloronicotinic acid  
 10200-59-6, Thiazole-2-carboxaldehyde 14002-51-8, 4-Biphenylcarbonyl  
 chloride 17012-21-4, Methyl 1-benzylpyrrolidine-3-carboxylate  
 19235-89-3, 4-Chloro-2-cyanopyridine 19524-06-2 21717-96-4,  
 2-Amino-5-fluoropyridine 29943-42-8, Tetrahydro-4H-pyran-4-one  
 40499-83-0, 3-Hydroxypyrrolidine 55737-66-1, 4-Methoxycarbonyl-2-  
 nitrobenzoic acid 57260-71-6, N-tert-Butoxycarbonylpiperazine  
 57946-63-1, 2-Bromo-4-trifluoromethylaniline 76143-33-4,  
 5-Methoxycarbonyl-2-nitrobenzoic acid 79099-07-3, 1-tert-Butoxycarbonyl-  
 4-piperidone 84358-13-4, 1-tert-Butoxycarbonyl-isonipecotic acid  
 93913-86-1 103057-44-9, 1-tert-Butoxycarbonyl-3-hydroxypyrrolidine  
 109384-19-2, 1-tert-Butoxycarbonyl-4-hydroxypiperidine 118486-94-5,  
 2-(Tributylstannyl)furan 124252-41-1, 4-(Tributylstannyl)pyridine  
 141699-55-0, 1-tert-Butoxycarbonyl-3-hydroxyazetidine 173382-28-0  
 175278-17-8 183158-31-8 186550-13-0 218777-23-2 219493-02-4  
 280115-99-3 280769-38-2 280774-10-9 280774-11-0 280774-12-1  
 280774-13-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of heteroaryl-substituted arom. amides as factor **Xa**  
 inhibitors)

IT 385-02-4P 394-01-4P 1709-59-7P 2965-22-2P 2976-30-9P 3356-88-5P  
 5470-49-5P 5731-17-9P 17459-03-9P 18229-61-3P 33890-03-8P,  
 4-Aminoisophthalic acid 61014-96-8P 63069-48-7P, 4-Chloro-2-  
 iodoaniline 70684-84-3P 75541-82-1P 76842-15-4P 97776-06-2P  
 116721-57-4P 117145-55-8P 117145-66-1P 123855-51-6P,  
 1-tert-Butoxycarbonyl-4-hydroxymethylpiperidine 130234-74-1P  
 130309-46-5P 130658-67-2P 137076-22-3P, 1-tert-Butoxycarbonyl-  
 piperidine-4-carboxaldehyde 138647-49-1P 142374-19-4P 154348-17-1P  
 159974-55-7P 159974-59-1P 166954-15-0P 168077-29-0P 183170-69-6P  
 184368-74-9P 188604-84-4P 202202-36-6P 217487-18-8P 219492-85-0P  
 229342-58-9P 229342-63-6P 229343-30-0P 251548-94-4P 280771-58-6P  
 280771-59-7P 280771-60-0P 280771-61-1P 280771-62-2P 280771-63-3P  
 280771-64-4P 280771-65-5P 280771-66-6P 280771-67-7P 280771-68-8P  
 280771-69-9P 280771-70-2P 280771-72-4P 280771-73-5P 280771-75-7P  
 280771-78-0P 280771-79-1P 280771-80-4P 280771-81-5P 280771-82-6P  
 280771-83-7P 280771-84-8P 280771-85-9P 280771-87-1P 280771-88-2P  
 280771-90-6P 280771-91-7P 280771-93-9P 280771-94-0P 280771-96-2P  
 280771-97-3P 280771-98-4P 280771-99-5P 280772-00-1P 280772-01-2P  
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 280772-27-2P 280772-28-3P 280772-29-4P 280772-31-8P 280772-32-9P  
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 280772-39-6P 280772-40-9P 280772-41-0P 280772-42-1P 280772-43-2P  
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 280772-68-1P 280772-69-2P 280772-71-6P 280772-72-7P 280772-74-9P  
 280772-75-0P 280772-77-2P 280772-78-3P 280772-79-4P 280772-80-7P  
 280772-82-9P 280772-83-0P 280772-84-1P 280772-85-2P 280772-87-4P  
 280772-88-5P 280772-89-6P 280772-90-9P 280772-92-1P 280772-93-2P